

11/12/99  
JC690 U.S. PTO

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No. 1539.58

Anticipated Classification of this application:

Class \_\_\_\_\_ Subclass \_\_\_\_\_

Prior application:

Examiner: S. CANGIOLOSI

Art Unit: 2746

A  
11/12/99  
JC572 U.S. PTO  
09/439859  
11/12/99  
Barcode

Commissioner of Patents and Trademarks

Washington, D.C. 20231

FILING UNDER 37 CFR 1.60

**WARNING:** A c-i-p (continuation-in-part) cannot be filed under 37 CFR 1.60.

**WARNING:** Filing under 37 CFR 1.60 is permitted only if filed by the same or less than all the inventors named in the prior application.

**WARNING:** The filing of an application as the United States stage of an International Application requires an oath or declaration. 37 CFR 1.61(a)(4).

**WARNING:** The claims of this new application may be finally rejected in the first Office action where all claims of the new application are drawn to the same invention claimed in the earlier application and would have been properly finally rejected on the grounds or art of record in the next Office action if they had been entered in the earlier application. MPEP § 706.07(b).

This is a request for filing a

- Continuation  
 Divisional

application under 37 CFR 1.60, of pending prior application

serial no. 08/872,082 filed on June 10, 1997

(date)

of KENNETH G. MAGES AND Jie Feng

for METHOD OF SECURE SERVER CONTROL OF LOCAL MEDIA VIA A TRIGGER  
THROUGH A NETWORK FOR LOCAL ACCESS OF ENCRYPTED DATA ON AN  
INTERNET WEBPAGE

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this 37 CFR 1.60 request and the documents referred to as attached therein are being deposited with the United States Postal Service on this date November 12, 1999 in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR 1.10, Mailing Label Number EM410542165US addressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231

Milton S. Gerstein

(Type or print name of person mailing paper)

(Signature of person mailing paper)

**NOTE:** Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. (37 CFR 1.10(b)).

**NOTE:** 37 CFR 1.60 permits the omission of a declaration only if the prior application was complete as set forth in 37 CFR 1.51(a), namely, the prior application comprised at least (1) a specification, including a claim or claims; (2) a declaration; (3) drawings when necessary; and (4) the prescribed filing fee. Accordingly, as presently worded, 37 CFR 1.60 does not permit this procedure to be used where the prior application is pending but only the processing and retention fee required by 37 CFR 1.21(l) is paid or where the declaration was not filed.

## 1. Copy of Prior Application as Filed Which Is Attached

**NOTE:** Under 37 CFR 1.60 practice signing and execution of the application by the applicant may be omitted provided the copy is supplied by and accompanied by a statement by the applicant or his or her attorney or agent that the application papers comprise a true copy of the prior application as filed and that no amendments referred to in the declaration filed to complete the prior application introduced new matter therein.

**NOTE:** This statement need not be verified if made by an attorney registered to practice before the PTO. (37 CFR 1.60(b)).

- I hereby verify that the attached papers are a true copy of what is shown in my records to be the above identified prior application, including the oath or declaration originally filed (37 CFR 1.60)

The copy of the papers of prior application as filed which are attached are as follows:

- 107 page(s) of specification  
 3 page(s) of claims  
 1 page(s) of abstract  
 10 sheet(s) of drawing

(Also complete 5 below if drawings are to be transferred)

- 3 pages of declaration and power of attorney

If the copy of the declaration being filed does not show applicant's signature indicate thereon that it was signed and complete the following:

- in accordance with the indication required by 37 CFR 60(b) my records reflect that the original signed declaration showing applicant's signature was filed on \_\_\_\_\_  
 the amendment referred to in the declaration filed to complete the prior application and I hereby state, in accordance with the requirements of 37 CFR 1.60(b), that this amendment did not introduce new matter therein.

## 2. Amendments

**WARNING:** "The claim of a new application may be finally rejected in the first Office action in those situations where (1) the new application is a continuing application of, or a substitute for, an earlier application, and (2) all the claims of the new application (a) are drawn to the same invention claimed in the earlier application, and (b) would have been properly finally rejected on the grounds or art of record in the next Office action if they had been entered in the earlier application." MPEP § 706.07(b).

- Cancel in this application original claims 2-8 of the prior application before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)  
 A preliminary amendment is enclosed. (Claims added by this amendment have been properly numbered consecutively beginning with the number next following the highest numbered original claim in the prior application.)

**NOTE:** Only amendments reducing the number of claims or adding a reference to the prior application (Rule 1.78(a)) will be entered before calculating the filing fee and granting the filing date. 37 CFR 1.60(b).

**NOTE:** "When filing under Rule 1.60 retain at least one original claim from the patent application to assure a complete application." Notice of March 3, 1986 (1064 O.G. 37-38).

### 3. Fee Calculation

CLAIMS AS FILED			
Number filed	Number Extra	Rate	Basic Fee
			\$340.00
Total Claims	-20=	X	\$ 12.00
Independent Claims	-3=	X	\$ 34.00
Multiple dependent claim(s), if any		X	\$110.00

Fee for extra claims is not being paid at this time.

NOTE: If the fees for extra claims are not paid on filing they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency. 37 CFR 1.16(d).

Filing Fee Calculation \$ 994

### 4. Small Entity Status

- A verified statement that this filing is by a small entity:  
 is attached  
 has been filed in the parent application and such status is still proper and desired (37 CFR 1.28(a))

Filing Fee Calculation (50% of above) \$ 497

NOTE: Any excess of the full fee paid will be refunded if a verified statement is filed within 2 months of the date of timely payment of a full fee than the excess fee paid will be refunded on request. 37 CFR 1.28(a).

NOTE: 37 CFR 1.28(a), last sentence states: "Applications filed under §1.60 or §1.62 of this part must include a reference to a verified statement in a parent application if status as a small entity is still proper and desired."

### 5. Drawings

**WARNING:** Do not check the following box if prior case is not to be abandoned.

- Transfer the drawings from the prior application to this application and, subject to item 16 below, abandon said prior application as of the filing date accorded this application. A duplicate copy of this request is enclosed for filing in the prior application file. (May only be used if signed by (1) applicant, (2) assignee of record or (3) attorney or agent of record authorized by 37 CFR 1.138 and before payment of issue fee.)

NOTE: "A registered attorney or agent acting under the provisions of § 1.34(a), or of record, may also expressly abandon a prior application as of the filing date granted to a continuing application when filing such a continuing application." 37 CFR 1.138

- Transfer the following sheet(s) of drawing from the prior application to this application \_\_\_\_\_

NOTE: Transferred sheets must be cancelled in prior application. 37 CFR 1.88.

- New drawings are enclosed  
 formal  
 informal

NOTE: The Notice of October 7, 1985 (1059 O.G. 38-39) states the following: "Submission of Drawings—For your convenience and for more effective handling of any drawing corrections which may be necessary, please DO NOT SUBMIT ORIGINAL DRAWINGS WITH PATENT APPLICATIONS. DO SUBMIT THREE HIGH QUALITY COPIES. If the copies submitted pass the formality review and patent examination, no substitute

PATENT FEE GUIDE

drawings will be necessary. If corrections are necessary, they should be made to the original drawings. Either a good copy of the corrected drawings or the corrected original can then be submitted after the Notice of Allowability is mailed." The Notice of November 25, 1985 (1061 O.G. 12) further clarifies the submission of drawing practice by pointing out that the copies that are submitted to the office must be on strong, white, smooth and non-shiny paper and also points out that drawings for patent applications do not need to be submitted on bristol board.

#### 6. Priority—35 U.S.C. 119

- Priority of application serial no. \_\_\_\_\_ filed on \_\_\_\_\_  
in \_\_\_\_\_ is claimed under 35 U.S.C. 119. \_\_\_\_\_ (country)  
 The certified copy has been filed in prior U.S. application serial no. \_\_\_\_\_ on \_\_\_\_\_  
 the certified copy will follow

#### 7. Relate Back—35 U.S.C. 120

- Amend the specification by inserting before the first line the sentence:  
This is a  
 continuation  
 divisional  
of co-pending application serial no. 08/872,082 filed on June 10, 1997

#### 8. Inventorship Statement

NOTE: If the continuation or divisional application is filed by less than all the inventors named in the prior application a statement must accompany the application when filed requesting deletion of the names of the person or persons who are not inventors of the invention being claimed in the continuation or divisional application. 37 CFR 1.60(b) [emphasis added]

(complete appropriate items (a) and (b))

- (a) With respect to the prior copending U.S. application from which this application claims benefit under 35 USC 120 the inventor(s) in this application is (are):

(complete applicable item below)

- the same  
 less than those named in the prior application and it is requested that the following inventor(s) identified above for the prior application be deleted:

(Type name(s) of inventor(s) to be deleted)

- (b) The inventorship for all the claims in this application are

- the same  
 not the same, and an explanation, including the ownership of the various claims at the time the last claimed invention was made, is submitted.

#### 9. Assignment

- The prior application is assigned of record to  
HyperLOCK Technologies, Inc.  
 an assignment of the invention to \_\_\_\_\_

is attached

**10. Fee Payment Being Made At This Time**

- Not Enclosed  
 No filing fee is submitted. (*This and the surcharge required by 37 CFR 1.16(e) can be paid subsequently.*)  
 Enclosed
- |  |          |
|--|----------|
| <input checked="" type="checkbox"/> basic filing fee   | \$ 497   |
| <input type="checkbox"/> recording assignment<br>(\$7.00; 37 CFR<br>1.21(h)(1))                    | \$ _____ |
| <input type="checkbox"/> processing and retention fee<br>(\$100.00; 37 CFR 1.53(d)<br>and 1.21(l)) | \$ _____ |

*NOTE: 37 CFR 1.21(l) establishes a fee for processing and retaining any application which is abandoned for failing to complete the application pursuant to 37 CFR 1.53(d) and this, as well as the changes to 37 CFR 1.53 and 1.78 indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee or the processing and retention fee of § 1.21(l) within 1 year from notification under § 53(d) must be paid.*

Total fees enclosed \$ 497

**11. Method of Payment of Fees**

- enclosed is a check in the amount of \$ 497  
 charge Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_.  
A duplicate of this request is attached.

*NOTE: Fees should be itemized in such a manner that is clear for which purpose the fees are paid. 37 CFR 1.22(b).*

**12. Authorization To Charge Additional Fees**

**WARNING:** If no fees are being paid on filing do not complete this item.

**WARNING:** Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges if extra claim charges are authorized.

- The Commissioner is hereby authorized to charge the following additional fees which may be required by this paper and during the entire pendency of the application to Account No. 08-0425
- 37 CFR 1.16 (filing fees)  
 37 CFR 1.16 (presentation of extra claims)

*NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid on these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR 1.16(d)) it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.*

- 37 CFR 1.17 (application processing fees)

**WARNING:** While 37 CFR 1.17(a), (b), (c) and (d) deal with extensions of time under § 1.136(a) this authorization should be made only with the knowledge that: "Submission of the appropriate extension fee under 37 CFR 1.136(a) is to no avail unless a request or petition for extension is filed." (Emphasis added). Notice of November 5, 1985 (1060 O.G. 27).

- 37 CFR 1.18 (issue fee at or before mailing Notice of Allowance, pursuant to 37 CFR 1.311(b)).

*NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 CFR 1.311(b).*

*NOTE: 37 CFR 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying or at the time of paying . . . issue fee." From the wording of 37 CFR 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.*

**13. Power of Attorney**

The power of attorney in the prior application is to  
Milton S. Gerstein

27,891

Attorney

Reg. No.

- a.  The power appears in the original papers in the prior application
- b.  Since the power does not appear in the original papers, a copy of the power in the prior application is enclosed.
- c.  A new power has been executed and is attached.
- d.  Address all future communications to

Hamman & Benn  
10 S. LaSalle Street  
Suite 3300  
Chicago, Illinois 60603

*(Item d may only be completed by applicant, or attorney or agent of record)*

**14. Maintenance of Copendency of Prior Application**

*(This item must be completed and the papers filed in the prior application if the period set in the prior application has run)*

- A petition, fee and response has been filed to extend the term in the pending prior application until \_\_\_\_\_

**NOTE:** *The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the papers constituting the filing of the Continuation Application. Notice of November 5, 1985 (1060 O.G. 27)*

- A copy of the petition for extension of time in the prior application is attached.

**15. Conditional Petition for Extension of Time in Prior Application**

*(complete this item and file conditional petition in the prior application if previous item not applicable)*

- a conditional petition for extension of time is being filed in the pending parent application.

**NOTE:** *The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the paper constituting the filing of the continuation application. Notice of November 5, 1985 (1060 O.G. 27).*

- A copy of the conditional petition for extension of time in the prior application is attached.

**16. Abandonment of Prior Application (If applicable)**

**WARNING:** *(Do not complete this item if the application being filed is a divisional of the prior application which is not being abandoned)*

**NOTE:** *"A registered attorney or agent acting under the provisions of § 1.34(a), or of record, may also expressly abandon a prior application as of the filing date granted to a continuing application when filing such a continuing application." 37 CFR 1.138.*

- Please abandon the prior application at a time while the prior application is pending or when the petition for extension of time or to revive in that application goes.

is granted and when this application is granted a filing date so as to make this application copending with said prior application.

I hereby declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Milton S. Gerstein

Type or print name of person signing



Signature

November 12, 1999

Date  
Hamman & Benn  
10 S. LaSalle St.

P.O. Address of Signatory  
Suite 3300  
~~Chicago, Ill.~~ 60603

Tel. No.: (312) 372-2920

Reg. No. 27,891  
(if applicable)

- Inventor
- Assignee of complete interest
- Person authorized to sign on behalf of assignee
- Attorney or agent of record
- Filed under Rule 34(a)

*(Complete the following if applicable)*

Type name of assignee

Address of assignee

Title of person authorized to sign on behalf of assignee

Assignment recorded in PTO on \_\_\_\_\_

Reel \_\_\_\_\_ Frame \_\_\_\_\_

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: KENNETH MAGES, ET AL.

TITLE: METHOD OF SECURE SERVER CONTROL OF LOCAL ...

SERIAL NUMBER:

FILING DATE:

GROUP: ART UNIT

EXAMINER:

To: The Commissioner of Patents and Trademarks  
Washington, D. C. 20231

**PRELIMINARY AMENDMENT**

S i r:

In advance of the first office action, please amend the above-identified application as follows.

**IN THE SPECIFICATION:**

Page 1, line 1, in the title, after "METHOD", insert  
-- AND APPARATUS --;

**IN THE CLAIMS:**

Cancel claim 1, and add the following new claims.

**CLAIM 9.** A method of transmitting data invoking a crippled file on a storage medium containing video and/or audio over a network, comprising:

(a) crippling the video and/or audio files on the storage medium, whereupon the files are rendered unusable without an uncrippling trigger;

FEBRUARY EIGHTH, 1998

(b) storing uncrippling trigger data comprising selected information at a host computer means for use in uncrippling the data files on the storage medium;

(c) transmitting the uncrippling trigger data from the host computer means through a network to the end-user's computer means with which the storage medium having the crippled data files thereon is associated;

(d) receiving the uncrippling trigger data at the end-user's computer means in the volatile RAM of the end-user's computer means; and

(e) substantially instantly uncrippling the crippled data files on the storage medium by means of combining in RAM the uncrippling trigger data sent by the host computer means in said step (d) with the crippled data on the storage medium; and

step (e) being carried out immediately after said step (d), and, immediately after said step (e), playing the video and/or audio on a player means;

said step (e) comprising:

1) directing the incoming uncrippling trigger data to RAM for temporary storage therein;

2) combining in RAM said uncrippling trigger data with said crippled video and/or audio files; and

3) said step of playing being performed while said uncrippling data is in said RAM for immediate playback of said video and/or audio files on said storage medium.

**CLAIM 10.** A method of transmitting data invoking a crippled file on a storage medium containing video and/or audio data over the Internet, comprising:

00000000000000000000000000000000

(a) storing uncrippling trigger data at a host computer for use in uncrippling video/audio files on a storage medium;

(b) transmitting the uncrippling trigger data from the host computer through the Internet to the end-user's computer with which the storage medium having the crippled files thereon is associated;

(c) receiving the uncrippling trigger data at the end-user's computer over the Internet;

(d) immediately after said step (c), uncrippling the crippled data files on the storage medium by means of the uncrippling trigger data sent by the host computer in said step (b);

(e) immediately after said step (d), playing the video and/or audio on a player;

said step (c) comprising directing the incoming uncrippling trigger data to volatile RAM for temporary storage therein, combining in RAM said trigger data with said crippled file;

said step (d) being performed while said uncrippling data is in said volatile RAM for immediate playback of said video and/or audio files by said step (e).

**CLAIM 11.** In a storage device, for use with a computer, which storage device comprises memory means for storing digital data thereon, the improvement comprising:

said memory means comprising crippled data files representative of video and/or audio;

an end-user's computer for use in playing back the crippled data files on the storage device;

a host computer having a memory means for storing uncrippling data comprising selected data thereon for said crippled data files on said storage device;

a network system linking said end-user's computer with said host computer, whereupon said host computer's sending said uncrippling data stored in said memory means thereof to said end-user's computer, said crippled data files on said storage device, associated with said end-user's computer is uncrippled in the RAM of the end-user's computer and rendered playable;

volatile memory means for receiving said uncrippling triggering data; means for immediately joining said uncrippling triggering data and said data files of said storage device in said RAM, for immediate playback of said data files;

said end-user's computer further comprising player means for playing back the uncrippled data files.

**CLAIM 12.** The storage device for use with a computer according to claim 11, said wherein said storage device comprises CD-ROM means.

**CLAIM 13.** A method of transmitting data invoking a crippled file on a memory-storage medium containing video and/or audio over the Internet, comprising:

(a) storing encoded uncrippling trigger data at a host computer for use in uncrippling video/audio files on a memory-storage medium;

(b) transmitting the encoded uncrippling trigger data from the host computer through the Internet to the end-user's computer with which the memory-storage medium having the crip-

pled files thereon is associated;

(c) receiving the encoded uncrippling trigger data at the end-user's computer over the Internet; and

(d) decoding the encoded uncrippling trigger data at the end-user's computer; and

(e) uncrippling the crippled data files on the memory-storage medium by means of the uncrippling trigger data sent by the host computer in said step (b).

**CLAIM 14.** The method of transmitting data invoking a crippled file on a memory-storage medium containing video and/or audio over the Internet, according to Claim 13, wherein before said step (a), removing the header data from the video/audio files; said step (d) comprising restoring the header data representing the header data removed from the video/audio files.

**CLAIM 15.** The method of transmitting data invoking a crippled file on a memory-storage medium containing video and/or audio over the Internet, according to Claim 13, wherein after said step (e), playing the video and/or audio on a player.

**CLAIM 16.** The method of transmitting data invoking a crippled file on a memory-storage medium containing video and/or audio over the Internet, according to Claim 13, wherein said step (a) comprises storing at least one of the following: Video/audio header data; data for removing the hidden-status flag for the video/audio data files on the memory-storage medium; data for unzipping the zipped data files of the video/audio data files on memory-storage medium; data for changing the extension of the video/audio data files.

**CLAIM 17.** In a memory-storage medium for use with a computer, which memory-storage medium comprises memory means for storing data thereon, the improvement comprising:

    said memory means containing files representative of video and/or audio;

    said files being crippled, whereby, without uncrippling trigger data, said data files are not capable of being played by a computer;

    said crippled files missing necessary data that allows for the playback thereof; and

    separate and independently-stored uncrippling trigger data, said trigger data comprising said missing necessary data; and

    another memory means separate and independent from said memory means containing files representative of video and/or audio, said trigger data being stored on said another memory means.

**CLAIM 18** A method of transmitting data invoking a crippled file on a storage medium containing video and/or audio data over a network, comprising:

    (a) storing uncrippling trigger data at a host computer for use in uncrippling video/audio files on a storage medium;

    (b) transmitting the uncrippling trigger data from the host computer through a network to the end-user's computer with which the storage medium having the crippled files thereon is associated;

(c) receiving the uncrippling trigger data at the end-user's computer over the network;

(d) after said step (c), uncrippling the crippled data files on the storage medium by means of the uncrippling trigger data sent by the host computer in said step (b);

(e) before said step (a), removing a necessary portion of said video/audio files without which said video/audio files are rendered unusable, said necessary portion constituting said trigger data of said step (a).

R E M A R K S

The present amendment has been submitted in order to add new claims.

Respectfully submitted,

By:   
Milton S. Gerstein  
Reg. No. 27,891

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EXPRESS MAIL LABEL NO: EG944548064US

METHOD OF SECURE SERVER CONTROL OF LOCAL MEDIA  
VIA A TRIGGER THROUGH A NETWORK FOR INSTANT LOCAL ACCESS  
OF ENCRYPTED DATA ON AN INTERNET WEBPAGE

A portion of the disclosure of this patent document contains material which is subject to copyright protection. The copyright owner has no objection to facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent & Trademark Office patent file or records, but otherwise reserves all copyright rights whatsoever.

**CROSS REFERENCE TO RELATED APPLICATION**

The present application is a continuation-in-part of application serial number 08/792,092, filed on January 31, 1997, which is a continuation-in-part of application serial number 08/568,631, filed on December 7, 1995, and a continuation-in-part of application serial number 08/756,162, filed on November 25, 1996.

**BACKGROUND OF THE INVENTION**

The present invention is directed to a method of transmitting "triggering data" over a network to cause video and/or audio information data on a Internet Web Page

The Internet is a conglomeration of computer networks that are linked together. Each network of the Internet may have one or more servers, and an operating system that may be different from that of others in the Internet. To link one network to another, and in order to overcome these operating differences between computer networks, the Internet system utilizes hardware and software devices called: bridges, routers, and gateways, all of

which adapt the information being sent on one network to the operating and protocol requirements of the receiving network. For example, a gateway will connect, or "splice" a network operating on the Novell protocol to a network that operates on a DECnet or SNA protocol.

There are currently more than 10,000 computer networks that are linked together, worldwide, which together constitute the "Internet". Because they do not all operate on the same operating system, and because of different protocols, the data sent from one host computer of one network to a receiving computer of another network - which may be many thousands of miles away from the host computer - may take a relatively long time, since the gateways, bridges and routers must conform or adapt the protocol of the sending host computer to the receiving computer's protocol.

In addition to the time-delays associated with protocol variances, the Internet when connecting to an end-user via Plain Old Telephone Service (POTS), has a maximum data-transmission capacity of 3.6 kbytes per second, which is not enough for sending video images in real time.

The Internet system utilizes two types of file-transfer protocols (FTP) for copying a file from a host computer to the receiving computer: ASCII and binary. An ASCII file is a text file, while every other kind of file is binary. ASCII files are transmitted in seven-digit ASCII codes, while the binary files are transmitted in binary code. Because all data stored in computer memory is stored in binary format, when one sends a file in the Internet, it is sent in binary format. However, as discussed above, owing to the data-transmission constraints imposed by the Internet system because of the differing operating systems, and a multitude of gateways, routers, and bridges, the file data must be sent out in packets of a size no greater than 1536 bytes.

Since the size of just a thirty-second video may be as great as 2.5 megabytes, it may take up to one-half hour or more to send a thirty-second video over the Internet from a host computer to a receiving computer. Presently, there are compression techniques that compress the files in order to reduce this playback-time, which data is decompressed at the receiving computer. An example of such a system is VDOLive, manufactured by VDOnet Corp. of Santa Clara, California. However, these compression-systems still send the data in binary format, requiring packet-data sizes of no greater than 1536 bytes. Thus, even with these compression-systems, the length of time to receive a thirty-second video over the Internet after being buffered in the user's computer is near real time, but is unstable, choppy and drops as much as 96% of the video data over a conventional phone line.

In the Internet, there is an electronic-mail delivery system called E-mail. The E-mail system utilizes addresses to direct a message to the recipient, with each address having a mailbox code and a daemon, with the mail box and daemon being separated by the symbol @. In the E-mail delivery system, all of the messages or "mail" are routed through selected routers and gateways, until it reaches what may be called a "post office" that services the recipient to whom the electronic mail is to be delivered. The "post office" is a local server. The need for these local "post offices" is because there is every reason to assume that the recipient-computer, to which the mail is being sent, is either not powered up, or is performing a different task. Since most computers in the Internet are not multi-tasking machines, such as, for example, computers running on the DOS operating system, if such a computer be engaged in performing a task, it is not possible for it to receive the E-mail data at that time. Thus, the local "post office" or server stores the message until such a time as it may be delivered to the end-user to whom it is intend-

ed.

In the E-mail system, there has really been only one format standard for Internet messages. A variation has been the MIME version, which stands for Multipurpose Internet Mail Extensions, which defines a new header-field, which is intended for use to send non-text messages, such as multimedia messages that might include audio or images, by encoding the binary into seven-digit ASCII code. Before MIME, the limitation of E-mail systems was the fact that it would limit the contents of electronic mail messages to relatively short lines of seven-bit ASCII. This has forced users to convert any non-textual data that they may wish to send into seven-bit bytes representable as printable ASCII characters before invoking a local mail UA (User Agent, a program with which human users send and receive mail). Examples of such encodings currently used in the Internet include pure hexadecimal, uuencoded, the 3-in-4 base 64 scheme specified in RFC 1421, the Andrew Toolkit Representation [ATK], and many others. Even though a user's UA may not have the capability of dealing with the non-textual body part, the user might have some mechanism external to the UA that can extract useful information from the body part. Moreover, it does not allow for the fact that the message may eventually be gatewayed back into an X.400 message handling system (i.e., the X.400 message is "tunneled" through Internet mail), where the non-textual information would definitely become useful again. With MIME, video and/or audio data may be sent using the E-mail system. MIME uses a number of header-fields, such as "Content-Type" header field, which can be used to specify the type and subtype of data in the body of a message and to fully specify the native representation (encoding) of such data; "text" Content-Type value header field, which can be used to represent textual information in a number of character sets and formatted text description languages in a standardized manner;

"multi-part" Content-Type value, which can be used to combine several body parts, possibly of differing types of data, into a single message; "application" Content-Type value, which can be used to transmit application data or binary data, and hence, among other users, to implement an electronic mail file transfer service; "message" Content-Type value, for encapsulating another mail message; "image" Content-Type value, for transmitting still image (picture) data; "audio" Content-Type value, for transmitting audio or voice data; "video" Content-Type value, for transmitting video or moving image data, possibly with audio as part of the composite video data format; "Content-Transfer-Encoding" header field, which can be used to specify an auxiliary encoding that was applied to the data in order to allow it to pass through mail transport mechanisms which may have data or character set limitations. Two additional header fields may be used to further describe the data in a message body: The "Content-ID" and "Content Description" header fields.

However, there are considerable drawbacks and deficiencies in transmitting video images and/or audio data over the Internet using E-mail's MIME. Firstly, there is often considerable time delays, such that it may take up to ten or more minutes to send a thirty-second video clip over the E-mail system. In times of high-traffic usage, the delay may even be more than ten minutes. Secondly, the video image or audio data cannot be viewed or listened to by the end-user, or recipient, until all of the data of the entire video or audio file has been received by the receiving computer, which, also, adds a considerable time lag to the actual viewing or listening. Thirdly, the end-user or recipient computer must have the necessary E-mail and MIME software for decoding the data. Fourthly, since MIME is an E-mail protocol system, the data is transmitted via the E-mail system, meaning that it is routed through one or more post offices and servers,

which delay the transmission of the data, and which require that no other task be performed by the receiving computer if it is a single-tasking machine, like DOS-operating system machines. Fifthly, like all E-mail deliveries, the requisite E-mail software at the recipient computer must decode the encoded data received, and then cut-and-paste the data into a new file, such as NOTE PAD, which is time-consuming, before the new file is played back by a viewer or player.

#### SUMMARY OF THE INVENTION

It is the primary objective of the present invention to separate keys and data by providing a picture contained in a file or files on a Web Page accessible over the internet or intranet, having its informational data of picture, video and/or audio that is crippled, which data may only be read after it has been "uncrippled" by receiving "uncrippling" triggering data over the Internet from the end user's computer. This "key" has been provided by the Web Page via a data download after the end user has met certain requirements set by the party controlling the Web Page. The company's host computer serving the Internet may transmit the "uncrippling" data over the Internet to an end-user's receiving computer in order to uncripple and, thereby, actuate the crippled file contained on or accessable through the Web Page, so that the data thereon may be read by the end-user's receiving computer only in volatile memory such as RAM.

It is another objective of the present invention to enable server control of the access to its files by providing the end user the key to the "crippled" files accessable via the Web Page such that content by a company on the Internet may be better controlled, and whereby in conjunction with the content, video and/or audio playback may be combined with any updated, textual information, such as current price of a product or products,

location of a store or stores in the vicinity of the end-user's residence, etc. Specific tracks on the CD-ROM can thereby be controlled by the remote server.

It is another objective of the present invention to provide access to such "crippled" files, whereby the end user computer is provided with Internet start-up and connecting program that automatically and directly connects the end-user's computer to the company's or content provider's host server via the Internet, whereby, not only does such facilitate and encourage the connection of the end-user to the content provider's web page, but also provides the content provider with valuable marketing information, such as the physical location of the caller, whereby selected information unique to that caller may be downloaded to him over the Internet, such as name and addresses of stores of the company or advertiser nearest to the caller, etc.

It is another objective of the present invention to provide such file imaging, with or without audio, such that the data representing the picture or video and/or audio is not accessable off the end-user's computer, without first receiving the current "key" or de-crippling triggering data from the content provider's host server (URL) being a trigger as small as a few bytes.

It is another objective of the present invention to allow by server permission only, the end-user the ability to store said trigger on non-volatile media for permanent ownership of said data.

It is also an objective of the invention to provide a software program in the end-user computer called a "catcher" for catching the trigger data such as the file header, decoding it, and playing the file header data substantially "on the fly", so

that the video and/or audio data on the CD-ROM may be played back on the end-user's computer substantially immediately after having received the trigger data.

It is also an objective of the invention to store both the video files and the video player for playing the video files in encrypted form at the Web site associated with a server of the Internet or Intranet, which encrypted video files and video player are downloaded to a requesting computer having the software decryption keys for the encrypted video files and player, whereby the video files are protected from unauthorized playback or copying by screen-dumping and other such methods of capturing images.

Toward these and other ends, the method of the invention for transmitting the de-crippling triggering data for video and/or audio over the Internet consists of encoding the data representing critical information of the file keys such as the header of the picture/video/audio files accessible via the Web Page controlled by the Web Page provider, and transmitting that encoded key to a local server of the local web of the Internet serving the caller, or directly to an end-user's computer. The local server may then establishes a point-to-point socket-connection between the transmitting, host computer, and the receiving or end-user computer. When the encoded key is received by the Web Page from the End user's computer, the data is decoded and matched to the picture/video/audio files of accessable via the Web Page over the Internet, whereupon, since the data files now have an associated and complete header, the data thereof may be read, to thus allow the transmission or playback of the picture, video, or audio data on the end user's comuter.

Since the encoded header data that is sent over the Internet is a necessity before the end-user may view or playback the picture/video/audio data obtained from the Web Page, the host

computer may send along with the encoded data, additional information pertinent to the information contained in the encoded transmitted files, such as current prices, special offers or deals, locations of local stores or dealers, or any information that the host computer, content provider, would like the end-user to receive.

In order to encourage the end-user to view the picture/video/audio encoded files contained and accessable via the Web Page, the downloaded software may be provided with its own Internet dial-up program files for connecting to the host web server, so that very little time and effort is required on the part of the end-user.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be more readily understood with reference to the accompanying drawings, wherein:

Figure 1 is a pictorial representations of the hardware systems and software processes used for carrying out the present invention;

Figure 2 is a block diagram showing the hardware of the end-user's computer used for carrying out the present invention;

Figure 3 is a flow chart at a user's computer for accessing the trigger-data from a web-site;

Figure 4 is a flow chart for the server associated with the Internet for evaluating the trigger-request from the user's computer and for sending the trigger;

Figure 5 is a block diagram showing the socket-to-socket connection for transmitting the de-crippling, triggering key for causing the display of the video images and/or audio data of a "HyperCD" at the end-user's PC over the Internet from a host computer combined with a targeted URL to a recipient or end-user's computer;

Figure 6 is a block diagram showing the steps for forming on the CD-ROM the encoded video and audio data for use by the end-user recipient computer after having been crippled by removing the header-triggering key sent from the media files;

Figure 7 is a block diagram showing the process of triggering in order to invoke "HyperCD" video and/or audio data at the receiving computer for playback; and

Figure 8 is a pictorial representation of the hardware component and software processing involved;

Figure 9 is a flow chart showing the server-side of the Internet with the encrypted files thereat;

Figure 10 is a flow chart showing the "catcher" program of the invention at the end-user's computer for playing back the receiving data immediately;

Figure 11 is a block diagram of the catcher-program process; and

Figure 12 is a block diagram of a modification of the invention where instead of using a CD-ROM, the video and/or other information is downloaded via the Internet from a Web page, which video and/or other information is encrypted with a key, with the user's computer storing the corresponding decryption key therefore.

#### **DETAILED DESCRIPTION OF THE INVENTION**

Referring now to the drawings in greater detail, and to Figures 1 and 2 for now, the hardware used to carry out the present invention is shown. All of the hardware is conventional and well-known, and includes an end-user computer 1 having a CD-ROM drive 2 for playing a CD-ROM 3 having stored thereon crippled data 4 that is unreadable without first having received a trigger or uncrippling key 5. The end-user's computer 1 is connected via the Internet 6 to a host-computer server 7 which has stored

thereat the uncrippling or triggering key 5 for the information stored on the end-user's CD-ROM 3. The end-user's computer 1 has a display and a CPU 9 and a communication-device, such as a modem 10 for establishing communication with the Internet 6. The computer 1 also has the CD-ROM drive 2, hard-drive 11, RAM 13, and video system 8 including monitor as well as audio system 13.

Referring to Fig. 3, there is shown the flow charts for receiving the uncrippling key. The end-user first submits a request over the Internet for the uncrippling key (block 60). The user then waits for that key (block 62), and if the user is not authorized, the request is denied. If the request is authorized, then the uncrippling key is sent by the server and received by the end-user's computer (block 64), whereupon the end-user's computer directs the uncrippling key into volatile memory such as RAM, not into a RAM-disk to be visible, but saved in a dynamically allocated data structure in RAM accessible only by the receiving program, combined with crippled data read from the CD-ROM and displays the video/animation (block 68).

Figure 4 shows the process-flow that at the server side. The server conventionally provides the web pages to the Internet users (block 70), and awaits a user-request (block 72). If a request is received from an end-user's computer, the server evaluates the request (block 74) in order to authorize the transfer of the uncrippling key (block 76). If an authorization is granted, then the uncrippling, trigger key is sent (block 78).

Referring now to Figs. 5-7, video images and/or audio are converted from analog to digital and stored in crippled fashion in digitized format (block 10) on CD-ROM 3. The crippling of the CD-ROM is achieved by removing critical information such as the video-audio header, whereupon such video/audio data is rendered unreadable by the end-user's computer. The "HyperCD" 3 is provided with the URL (web page) of the designated host computer, or

server, (block 14), such, as for example: <http://tekweb.com/hypercd/adver/lotto.html>, which may be used on the CD-ROM for the Illinois Instant Lottery video advertising. Such digitized format may be existing computer memory files (block 12) that are already in binary format, or may be original files originated by recording the video and/or audio, as by a camcorder or tape, etc., and converting the analog signals into digital, or binary, code. In the case of originating files, the analog data may be converted to digital data using an INTEL "Smart Video Reorder Pro", for example. The raw binary data that is stored on the "HyperCD" (block 16) is crippled, so the only way to access the data is a socket-to-socket connection with the server of the web page of the host. By means of the process performed in block 14, the CD-ROM contains a code representing the URL web page of the host computer where the necessary decrapping key is located. This data on the CD-ROM 3 will automatically call up and connect the end-user's computer to the host computer's server 7 on the Internet, whereby a socket-to-socket connection is made therebetween (block 18). Such an automatic connection is well-known, and will automatically find the end-user's browser, will call the Internet service provider, and pass the necessary links from the CD-ROM to the browser in order to get to the host's web page. Such software is available on the "Windows 95" operating system, such as "ActiveX". The host computer then sends back to the local server serving the end-user's computer the necessary, uncripping trigger for the specific video/audio data on the end-user's CD-ROM (block 20). From the local server, the data is sent out directly over the Internet to the end-user, and, in particular, to the RAM 12 of the end-user's computer (block 22). In RAM, the trigger (block 22), and the data on the CD-ROM 3 are combined, and played back (block 24), as described above. However, as will be explained hereinbelow, since

the key 5 is being sent via Internet 6, the end-user's computer 7 must be equipped with the requisite software which is capable of receiving data from the server 7 and which will ensure that the received encoded key 5 is placed safely in RAM 12, and not allowed to be otherwise saved in hard drive 11 where it may be captured and used in a way not authorized by the server 7.

Referring to Figure 6, at the end-user computer end, the raw analog data of the audio/video is digitized (block 30), as explained above, and stored on CD-ROM 3 by conventional techniques. During the storage of the data on the key or critical information of the media file such as video-audio header associated with the video/audio files will be omitted from storage on the CD-ROM, whereupon the CD-ROM is crippled, or prevented from being read for playing back the video/audio files (block 32). The CD-ROM is provided with software for linking up the host-computer which has the necessary key 5 for uncrippling the video-audio files 4 on the CD-ROM 3, which linking software maps or automatically directs the end-user's computer to the host server via the Internet, such linking software having all of the necessary routing information for directing the Internet connection to the host computer's server and web page (URL) (Block 34). The encoding of the critical information such as "Header" trigger is achieved utilizing any conventional encoding program, such as, for example, RSA by Data Security (block 36). This encoding will create a trigger of a few bytes comprising all of the necessary information to trigger the CD-ROM, and to invoke the video and/or audio data.

Figure 7 shows the steps involved for de-crippling the data on the CD-ROM 3 of a receiving or end-user's computer 1 (block 40). A socket-to-socket connection is made between the host, or sending, computer and the receiving, or end-user's computer by means of the linking software described above installed on the

end-user's computer (block 42). The Internet Service Provider (ISP) of the end-user's computer's web of the Internet sends the data to the host computer's server over the Internet, which means that any number of local servers and gateways and routers will have been involved in transmitting the data, until it finally arrives at the server 7 serving the web associated with the host computer (block 42). As soon as this socket-to-socket connection is made, the encoded trigger 5 is sent, at a rate of about 3.6 kbytes a second (block 44). The end-user's computer has a specially-dedicated software program for catching the key, decrypting the key 5 from the server and data from the CD-ROM 3, combining the key and data and playing it back. This catcher is a software program discussed hereinbelow that will direct the incoming key, such as the header, to a random location in RAM 8 such as cache directory, of the computer (block 46) and the key will only be visible to the program. The catcher is necessary, since, if it were not present, it is the "nature" of personal computers to randomly dump data which has not had a specific destination assigned to it. Thus, without the catcher, the incoming data may be strewn into a different directory and/or sub-directories, to, thus, be irretrievably lost. As soon as the encoded key 5 arrives and is stored in RAM by means of the catcher program, a subroutine "player" in the program in the receiving computer begins to decode the trigger, in order to invoke the correct track of the CD-ROM (block 48), from which the data passes to the audio/video subsystem (8,13, Fig. 2), in order to play the video or audio (block 50). It is noted, and emphasized, that as soon as the key has been decoded, the video and/or audio data is immediately "played" back by the audio/video subsystems (8,13, Fig. 2), bypassing the necessity of having to first store the key, or other trigger, on a hard drive before playback. Referring specifically to Fig. 8, there are shown the server 1,

the user computer 2, and the software processes 3 used for transmitting the uncrippling key 4 over a network 5, the combining in RAM 6 of the key 4 and crippled data 7 from the CD-ROM 8, the rendering or displaying of the media data 9 such as video/audio or animation on the display 10 or from the audio system 11, and the storing of the key 4 to non-volatile media 13, such as a hard drive, for permanent ownership of the encrypted CD media.

It is noted that it is possible to "cripple" the video/audio data on the CD-ROM by other means other than deleting the header thereof. For example, the file could be made a hidden file, with the trigger data from the host computer being a command to remove the hidden status. Alternatively, the video/audio file could have a changed extension, with the trigger data from the host computer being a command to change the extension. Moreover, the crippling of the video/audio file may be achieved by the use of ZIP file, with the trigger data from the host computer being a command to UNZIP the data. It is, also, within the scope and purview of the invention to use a floppy disk for storing the crippled file, as described above, for those applications requiring less disk-memory, with the uncrippling data from the host server being sent to the floppy-disk drive via the catcher program, as described above for uncrippling the data on the floppy-disk. Of course, the crippled file may also be stored on any storage medium, such as the hard drive 11, with the uncrippling data from the host server being sent to the drive for that storage medium via the catcher program, as explained above. The uncrippling data may also be stored directly in a hard drive or EPROM so that the user has permanent access to it whenever he wishes to uncripple the file; that is, if the user wishes to permanently retain the crippled nature of the data on the CD-ROM, or floppy, he may permanently store the downloaded uncrippling data in hard drive in order to temporarily uncripple the data on the CD-ROM or floppy every time

that it is used, as long as such access is authorized by the server.

Referring to Figs. 9-11, the above-discussed "catcher" program is shown. Encrypted files, such as the header for the crippled CD-ROM data at an end-user's computer, is stored at a server associated with the Internet (block 100 in Fig.9). This header-trigger or other file is encoded and encrypted in a conventional manner at the server (blocks 102, 104). This encoding will create a header of about 50K or less comprising all of the necessary information necessary to the video and/or audio data on the CD-ROM, as is well-known in the art. Then, the encoded data is sent to the local web server (block 36) in order to be sent out over the Internet, and then to the end-user computer. When the end-user computer requests that the trigger be downloaded, according to the process described above (block 106 of Fig. 10), the catcher program at the end-user computer receives the partial data or trigger, such as a header for the CD-ROM file (block 108). The catcher program decodes the data, using a conventional decoder (block 110), and then sends the data directly to the conventional player of end-user computer (block 112) for substantially immediate playback. As soon as the encoded header arrives and is stored in the cache directory, the program entitled "player" in the receiving computer begins to decode the data, in order to regenerate the original binary code, from which the data passes to a conventional digital-to-analog converter, in order to play the video or audio. It is noted, and emphasized, that as soon as the header has been decoded, the video and/or audio data starts to play back by the digital-to-analog converter. That is, it is not necessary to store the trigger data on a hard drive, although it is possible to do so, if it is desired to allow the end-user unobstructed access to the video or audio files on the CD-ROM, or the like, at any time in the future.

Referring to Fig. 12, an alternative embodiment is shown. In this embodiment, the use of a hyperCD is obviated, and the video and/or audio, and other data, is downloaded via the Internet from a Web page (block 150). The video and/or audio, and other data, are encrypted with an encryption key. Each user who is to be able to access the data at that Web page will have a corresponding decryption key (block 152) for decrypting the data. In addition to the video or graphic or other data being sent, the Web site will also download the video player, such as JPEG, "QUICKTIME", or the like, to the user's computer via the Internet. The player, such as JPEG, is also encrypted, so that even after the end user has received the video and other data from the Web site via the Internet, the conventional player stored on the user's computer (block 154) will not be able to play the video. The data emanating from the Internet is first identified with the requesting file of the user's computer (block 158), and then sent to the media player for playback (block 160) using the encrypted player, downloaded from the Web site. The encrypted player, such as JPEG, is decrypted, like the video data, using the decryption key (block 152) provided by the provider of the Web site. It is noted that before the video is downloaded from the Web site via the Internet, the user must first enter his password or other protective feature. According to this embodiment of the invention, videos at a Web site are protected from being viewed without proper authorization, and if the downloaded video were stored in memory of the user's computer, it would not be playable without first downloading the encrypted player, such as JPEG, from the Web site. Thus, the Web provider is able to protect his video and/or graphic data from being copied by the end user's computer. Although the end user may be able to print out a graphic, this would be of very poor quality. It is also within scope and purview of the invention to download only the encrypted player,

for playing back encrypted video and/or graphics already stored on the requesting, end user's computer. In this case, the video data may be supplied to the end user in other forms besides the Internet or Intranet, but still may not be played back without use of the encrypted player downloaded from the Web site and then decrypted by the decrypting key at the end user's computer. Alternatively, the encrypted player may be provided to the end user, and only the encrypted video files may be sent over the Internet or Intranet.

The following is the software code listing for the server of the host computer's web for bursting the encoded "header" trigger data through the Internet.

## SENDFILE.C

```

#!/usr/sbin/perl
# Get the input
read(STDIN, $buffer, $ENV{'CONTENT_LENGTH'});

# Split the name-value pairs
@pairs = split(/&/, $buffer);

foreach $pair (@pairs)
{
    ($name, $value) = split(/=/, $pair);

    # UN-Webify plus signs and %-encoding
    $value =~ tr/+/ /;
    $value =~ s/%([a-fA-FO-9][a-fA-FO-9]) /pack("C",hex($1)) /eg;

    $FORM{$name} = $value;
}

# Location of the CMC files
$CMCDIR = '/UL/people/CMC/' . $FORM{'dir'};

# If the $CMCDIR director is not found, exit
if ( ! -d "$CMCDIR" )
{
    &Error("$CMCDIR not found on this system. Please check the path and try again");
}

# If there are no files in the CMC directory no point trying to transfer files
else
{
    opendir( THISDIR, "$CMCDIR" );
    @allfiles = grep(/^.CMC/, readdir(THISDIR));
    if ( ! @allfiles ) {
        &Error("There are currently no CMC files in this directory. Try again later.");
    }
    sort @allfiles;
}

print ("HTTP/1.0 200\r\n");
print ("Content-type: multipart/x-mixed-replace;boundary=--ThisRandomString--\r\n\r\n");
print ("--ThisRandomString--\r\n");

#Send the First file with .IVD extension which invokes IVIDEO.EXE

print "Content-type: application/x-IVD\r\n";
$CONTENT = `cat $CMCDIR/CMC001.IVD`;
print $CONTENT;
print ("\r\n--ThisRandomString--\r\n");

# Now send rest of the .CMC files which would call filehd1.exe
while (@allfiles)
{
    $file = shift @allfiles;
    print "Content-type: application/x-CMC\r\n";
    print "$file\r\n";
    $CONTENT = `cat $CMCDIR/$file`;
    print $CONTENT;
    print ("\r\n--ThisRandomString--\r\n");
}

```

†

```
# Subroutine that tells what's wrong
sub Error
{
    print ("Content-type: text/html\n");
    print ("Title: Error\n");
    print ("H1: Error:\n");
    print (@_);
    print ("p

hrContact webmaster

");
    exit ();
}
```

†

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The following is the software code listing at the host-computer for encoding the "header" binary data into seven-digit ASCII text format, and also listed is the software code listing for the "player", or decoder, at each receiving, or end-user, computer, for decoding the encoded text format back into binary:

.LS1

```
HOOK_MENU1 MENU LOADONCALL MOVEABLE DISCHARDABLE
§
POPUP "&File"
§
MENUITEM "&Encode...",1169
MENUITEM "&Decode...",1170
†

POPUP "&Actions"
§
MENUITEM "&Concatenate Files...",1171
MENUITEM "&View A Report File...",1172
MENUITEM "C&lean Directories...",1173
MENUITEM SEPARATOR
MENUITEM "&Display Wincode Task",1174
MENUITEM "&Hide Wincode Task",1175
†

POPUP "&Options"
§
MENUITEM "&Encode...",1176
MENUITEM "&Decode...",1177
MENUITEM "&Wincode...",1178
MENUITEM "&Winsort...",1179
MENUITEM SEPARATOR
MENUITEM "&Viewer...",1180
MENUITEM SEPARATOR
MENUITEM "&ZIP/UNZIP...",1181
MENUITEM SEPARATOR
MENUITEM "&Hook App...",1182
†

POPUP "&Help"
§
MENUITEM "&Contents",1183
MENUITEM "&Search for Help on...",1184
MENUITEM "&How to Use Help",1185
MENUITEM "&Wincode FAQ",1186
MENUITEM "C&opyrights",1187
MENUITEM SEPARATOR
MENUITEM "O&rdering the Help file...",1188
MENUITEM SEPARATOR
MENUITEM "&About Wincode...",1189
†
MENUITEM SEPARATOR
MENUITEM "&UnHook Wincode",1190
MENUITEM SEPARATOR
```

```
MENUITEM "&Exit Wincode",1191
†
HOOK_MENU2 MENU LOADONCALL MOVEABLE DISCARDABLE
§
POPUP "&File"
§
MENUITEM "&Encode..."2269
MENUITEM "&Decode..."2270
†

POPUP "&Actions"
§
MENUITEM "&Concatenate Files..."2271
MENUITEM "&View A Report File..."2272
MENUITEM "C&lean Directories...",2273
MENUITEM SEPARATOR
MENUITEM "&Display Wincode Task",2274
MENUITEM "&Hide Wincode Task",2275
†

POPUP "&Options"
§
MENUITEM "&Encode..."2276
MENUITEM "&Decode..."2277
MENUITEM "&Wincode..."2278
MENUITEM "&Winsort..."2279
MENUITEM SEPARATOR
MENUITEM "&Viewer..."2280
MENUITEM SEPARATOR
MENUITEM "&ZIP/UNZIP...",2281
MENUITEM SEPARATOR
MENUITEM "&Hook App..."2282
†
POPUP "&Help"
§
MENUITEM "&Contents",2283
MENUITEM "&Search for Help on..."2284
MENUITEM "&How to Use Help",2285
MENUITEM "&Wincode FAQ",2286
MENUITEM "C&opyrights",2287
MENUITEM SEPARATOR
MENUITEM "O&rdering the Help file..."2288
MENUITEM "&About Wincode..."2289
†
MENUITEM SEPARATOR
```

```

MENUITEM "&UnHook Wincode",2290
MENUITEM SEPARATOR
MENUITEM "E&xit Wincode",2291
†
HOOK_MENU3 MENU LOADONCALL MOVEABLE DISCARDABLE
(
POPUP "&File"
§
MENUITEM "&Encode..."3369
MENUITEM "&Decode..."3370

†

POPUP "&Actions"
§
MENUITEM "&Concatenate Files..."3371
MENUITEM "&View A Report File..."3372
MENUITEM "C&lean Directories...",3373
MENUITEM SEPARATOR
MENUITEM "&Display Wincode Task",3374
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†

POPUP "&Options"
§
MENUITEM "&Encode..."3376
MENUITEM "&Decode..."3377
MENUITEM "&Wincode..."3378
MENUITEM "&Winsort..."3379
MENUITEM SEPARATOR
MENUITEM "&Viewer..."3380
MENUITEM SEPARATOR
MENUITEM "&ZIP/UNZIP...",3381
MENUITEM SEPARATOR
MENUITEM "&Hook App..."3382
†

POPUP "&Help"
§
MENUITEM "&Contents",3383
MENUITEM "&Search for Help on..."3384
MENUITEM "&How to Use Help",3385
MENUITEM "&Wincode FAQ",3386
MENUITEM "C&opyrights",3387
MENUITEM SEPARATOR
MENUITEM "O&rdering the Help file..."3388
MENUITEM SEPARATOR
MENUITEM "&About Wincode..."3389
†

MENUITEM SEPARATOR
MENUITEM "&UnHook Wincode",3390
MENUITEM SEPARATOR
MENUITEM "E&xit Wincode",3391
†
HOOK_WORKING DIALOG LOADONCALL MOVEABLE DISCARDABLE 100,89,141,55
STYLE WS_POPUP ¶ WS_VISIBLE ¶ WS_CAPTION
CAPTION "Wincode Working..."
FONT 8, "MS Sans Serif"
§
LTEXT "",103,81,19,27,8
LTEXT "",102,81,9,27,8
PUSHBUTTON "&Stop",104,18,37,45,13
PUSHBUTTON "&Quit",105,78,37,45,13

```

RTEXT "Total Job:", -1, 12, 19, 66, 8  
CONTROL "", 1, "STATIC", SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 6, 6, 129, 25  
RTEXT "", 101, 12, 9, 66, 8  
†  
BASE64\_TYPE DIALOG LOADONCALL MOVEABLE DISCARDABLE 71, 26, 123, 181  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
FONT 8, "MSSans Serif"  
§  
DEFPUSHBUTTON "OK", 1, 12, 163, 45, 13  
RADIOBUTTON "Application: &Octet-Stream:", 301, 12, 19, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
RADIOBUTTON "Application: &Postscript:", 302, 12, 34, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
RADIOBUTTON "Image: &JPEG", 303, 12, 49, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
RADIOBUTTON "Image: &GIF", 304, 12, 64, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
RADIOBUTTON "Image: &X-BMP", 305, 12, 79, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
RADIOBUTTON "Video: &MPEG", 306, 12, 94, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
RADIOBUTTON "Audio: X-&WAV", 307, 12, 109, 99, 12, BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
PUSHBUTTON "Cancel", 2, 66, 163, 45, 13  
GROUPBOX "Content-Type", 101, 6, 5, 111, 152, BS\_GROUPBOX ¶ WS\_GROUP

†  
DESC\_TEXT DIALOG LOADONCALL MOVEABLE DISCARDABLE 9, 50, 288, 138  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "Descriptive Text will be added to first Encoded file..."  
FONT 8, "MSSans Serif"  
§  
EDITTEXT 201, 6, 6, 276, 108, ES\_MULTILINE ¶ ES\_AUTOVSCROLL ¶ ES\_WANTRETURN  
¶ WS\_BORDER ¶ WS\_VSCROLL ¶ WS\_TABSTOP  
DEFPUSHBUTTON "OK", 1, 69, 120, 60, 13  
PUSHBUTTON "Cancel", 2, 159, 120, 60, 13  
†  
DIR\_SELECT DIALOG LOADONCALL MOVEABLE DISCARDABLE 15, 20, 147, 116  
STYLE DS\_MODALFRAME ¶ WS\_OVERLAPPED ¶ WS\_CAPTION ¶ WS\_SYSMENU  
FONT 8, "Helv"

```

§
EDITTEXT 101,42,5,98,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
DEFPUSHBUTTON "OK",1,88,22,50,14
LISTBOX 103,6,30,64,82,LBS_STANDARD ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,88,41,50,14
LTEXT "D&irectories:",-1,6,18,64 10
LTEXT "&Directory:",-1,6,6,36,10
†
EXISTS DIALOG LOADONCALL MOVEABLE DISCARDABLE 41,34,177,54
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Wincode - Output File"
FONT 8,"MS Sans Serif"
§
PUSHBUTTON "&Overwrite",1,9,36,45,13
PUSHBUTTON "&Rename",101,66,36,45,13
PUSHBUTTON "&Skip File",2,123,36,45,13
CTEXT "",102,21,15,135,8
CONTROL "",STATIC,SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 15,6,147,21
†
FILE OPEN DIALOG LOADONCALL MOVEABLE DISCARDABLE 40,20,202,130
STYLE DS_MODALFRAME ¶ WS_OVERLAPPED ¶ WS_CAPTION ¶ WS_SYSMENU
FONT 8,"Helv"
§
EDITTEXT 100,42,6,98,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
DEFPUSHBUTTON "OK",1,146,5,50,14
LISTBOX 102,6,44,64,82,LBS_STANDARD ¶ WS_TABSTOP
LISTBOX 103,76,44,64,82,LBS_STANDARD ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,146,23,50,14
LTEXT "File&name:",-1,6,8,36,10
LTEXT "Directory:",-1,6,20,36,10
LTEXT "",101,42,20,98,10
LTEXT "&Files:",-1,6,32,64,10
LTEXT "&Directories:",-1,76,32,64,10
†
RENAME DIALOG LOADONCALL MOVEABLE DISCARDABLE 34,31,199,57
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
FONT 8,"MS Sans Serif"
§
EDITTEXT 102,6,21,171,12 ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?",103,180,20,12,13
DEFPUSHBUTTON "OK",1,42,39,45,13
PUSHBUTTON "Cancel",2,111,39,45,13
LTEXT "Enter a VALID DOS filename:",104,6,6,159,9
†
VIEW_RPT DIALOG LOADONCALL MOVEABLE DISCARDABLE 20,43,300,154
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Wincode - Report File Viewer"
FONT 8,"MS Sans Serif"
§
DEFPUSHBUTTON "OK",2,111,135,78,13
EDITTEXT 101,6,15,288,99,ES_MULTILINE ¶ ES_READONLY ¶ WS_BORDER ¶ WS_VSCROLL ¶ WS_HSCROLL ¶ WS_TABSTOP
CHECKBOX "&Delete Report File After Viewing",103,6,117,138,12,BS-AUTOCHECKBOX ¶ WS_TABSTOP
LTEXT "File:",-1,7,5,15,8
LTEXT "",102,25,5,270,8
†

```

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The following is the software code listing at each receiving, or end-user, computer, for the catcher for receiving the uncrippling data in the cache directory of RAM and directing it to the proper drive:

```
MAIN_MENU MENU LOADONCALL MOVEABLE DISCARDABLE
§
POPUP "&File"
§
MENUITEM "&Encode...",101
MENUITEM "&Decode...",102
MENUITEM SEPARATOR
MENUITEM "E&xit",1
†

POPUP "&Actions"
§
MENUITEM "&Concatenate Files...",103
MENUITEM "&View a Report File...",104
MENUITEM "C&lean Directories...",105
MENUITEM SEPARATOR
MENUITEM "&Interactive Drag/Drop", 121
MENUITEM SEPARATOR
MENUITEM "Hook Wincode", 122
†

POPUP "&Options"
§
MENUITEM "&Encode...",106
MENUITEM "&Decode...",107
MENUITEM "&Wincode...",108
MENUITEM "W&insert...",109
MENUITEM SEPARATOR
MENUITEM "&Viewer...",110
MENUITEM SEPARATOR
MENUITEM "&ZIP/UNZIP...",111
MENUITEM SEPARATOR
MENUITEM "&Hook App...",112
†

POPUP "&Help"
§
MENUITEM "&Contents",113
```

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MENUITEM "&Search for Help on...",114
MENUITEM "&How to Use Help",115
MENUITEM "&Wincode FAQ",116
MENUITEM "C&copyrights",117
MENUITEM SEPARATOR
MENUITEM "O&rdering the Help file...",118
MENUITEM SEPARATOR
MENUITEM "&About Wincode...",119
† . 

§
ABOUT DIALOG LOADONCALL MOVEABLE DISCARDABLE 76,55,135,141
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "About CMCCODE"
FONT 8, "MS Sans Serif"
§
DEFPUSHBUTTON "OK",2,14,123,45,13
PUSHBUTTON "More...",1,74,123,45,13
CTEXT "CMCCODE:",-1,45,9,45,8
CTEXT "Video Encoder/Decoder", -1,10,18,114,8
CTEXT "for the Internet", -1,34,27,66,8
CTEXT "Copyright©xA9 1993,1994",1,24,72,87,8
CTEXT "Snappy_Inc.",-1,44,63,45,8
CONTROL "",-1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 6,6,123,111
CTEXT "Version 1.0",-1,40,37,54,8
CTEXT "Developers Kit Provided by:",-1,17,49,101,8
CTEXT "created by Caesar Collazo",-1,18,82,99,8
CTEXT "cmcinter@suba.com",-1,12,103,111,8
CTEXT "Questions...Comments...e-mailto:",-1,9,93,117,8
CONTROL "",-1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 12,47,111,1
CONTROL "",-1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 12,59,111,1
†

ALLONE DIALOG LOADONCALL MOVEABLE DISCARDABLE 35,31,132,60
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "CMCCODE - Encode Filename"
FONT 8, "MS Sans Serif"
§
EDITTEXT 101,28,23,75,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
†

```

```

DEFPUSHBUTTON "OK",1,12,42,45,13
PUSHBUTTON "Cancel",2,75,42,45,13
CTEXT "Enter a filename for ALL the files:",-1,6,7,120,9
+
BASE64_MODE DIALOG LOADONCALL MOVEABLE DISCARDABLE 93,54,111,69
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "BASE64 Method"
FONT 8, "MS Sans Serif"
§
DEFPUSHBUTTON "OK",1,6,51,45,13
RADIOBUTTON "&MIME Conformant", 323,12,10,87,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "&Raw BASE 64",324,12,25,87,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,60,51,45,13
GROUPBOX "",106,6,2,99,42,BS_GROUPBOX
+
CHOOSE_V DIALOG LOADONCALL MOVEABLE DISCARDABLE 15,20,174,78
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Selecta Report File Viewer"
FONT 8, "MS Sans Serif"
§
DEFPUSHBUTTON "OK",1,36,60,45,13
RADIOBUTTON "&Wincode Internal File Viewer (32K Max.)",701,12,10,150,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "Windows&Notepad", 702,12,24,150,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "&Other:",703,12,38,33,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
EDITTEXT 704,48,38,102,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?",705,153,38,12,13
PUSHBUTTON "Cancel",2,93,60,45,13
GROUPBOX "",101,6,2,162,54,BS_GROUPBOX
+
CLEAN_DIR DIALOG LOADONCALL MOVEABLE DISCARDABLE 52,51,228,162
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Clean Directories"
FONT 8, "MS Sans Serif"
§
DEFPUSHBUTTON "OK",1,92,143,45,13
CHECKBOX "",601,12,19,192,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "?",605,207,19,12,13

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```

CHECKBOX "" ,602,12,34,192,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "?" ,606,207,34,12,13
CHECKBOX "" ,603,12,49,192,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "?" ,607,207,49,12,13
CHECKBOX "" ,604,12,64,192,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "?" ,608,207,64,12,13
CHECKBOX "Empty the &Clipboard (release global memory)" ,612,12,102,192,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "?" ,613,207,102,12,13
PUSHBUTTON "Clean &All Directories" ,614,12,120,96,13
PUSHBUTTON "&Report Files Only (*.rpt)" ,615,120,120,96,13
PUSHBUTTON "Cancel" ,2,165,143,45,13
PUSHBUTTON "&Help" ,611,19,143,45,13
GROUPBOX "Select Directories to Clean" ,101,7,5,216,93,BS_GROUPBOX
LTEXT "Status:" ,-1,12,83,27,8
LTEXT "" ,610,42,83,177,8
†
DEC_CONFIG DIALOG LOADONCALL MOVEABLE DISCARDABLE 26,26,250,147
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Decode Options"
FONT 8,"MS Sans Serif"
§
DEFPUSHBUTTON "OK" ,1,195,9,45,13
CHECKBOX "Du&mp Files" ,301,12,9,69,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "&Run Decoded" ,302,12,21,69,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "&Error Checking" ,303,87,9,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "Sort b&y Extension" ,304,87,21,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "E&xten(s)..." ,305,6,42,66,13
COMBOBOX 306,120,41,42,60,CBS_DROPDOWNLIST ¶ WS_VSCROLL ¶ WS_TABSTOP
EDITTEXT 307,12,70,132,9,ES_AUTOHSCROLL ¶ NOT WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" ,308,147,67,12,13
RADIOBUTTON "Def&ault to location of Input file" ,309,12,99,132,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "User select &on Decode" ,310,12,112,132,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "&Set:" ,311,12,125,27,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
EDITTEXT 312,42,125,102,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" ,313,147,124,12,13
RADIOBUTTON "&Wincode select" ,314,174,110,66,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "&User select" ,315,174,125,66,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
PUSHBUTTON "Cancel" ,2,195,27,45,13

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```

PUSHBUTTON "&Defaults",316,195,45,45,13
PUSHBUTTON "&Help",317,195,63,45,13
GROUPBOX "Decoded File Name",102,168,96,75,45,BS_GROUPBOX
LTEXT "Code Type:",-1,78,44,39,8
GROUPBOX "Decoded File Directory",101,6,87,156,54,BS_GROUPBOX
CONTROL "",1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 6,6,156,30
GROUPBOX "Temp Directory",103,6,59,156,24,BS_GROUPBOX
†
DEC_EXT DIALOG LOADONCALL MOVEABLE DISCARDABLE 49,30,144,133
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Decode File Extension(s)"
FONT 8, "MS Sans Serif"
§
EDITTEXT 318,12,25,45,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "&Add",320,12,43,45,13
PUSHBUTTON "&Delete",321,12,61,45,13
PUSHBUTTON "A&ssociate",322,12,79,45,13
LISTBOX 319,73,26,58,69,LBS_NOTIFY ¶ WS_BORDER ¶ WS_BORDER ¶ WS_VSCROLL
DEFPUSHBUTTON "OK",1,18,115,45,13
PUSHBUTTON "Cancel",2,81,115,45,13
LTEXT "Enter Decode Extension: (Max + 20)",-1,12,13,120,8
CONTROL "",1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 6,6,132,102
LTEXT "Ext.Count:",-1,73,95,39,8
LTEXT "",323,114,95,16,8
†
DEF_FILES DIALOG LOADONCALL MOVEABLE DISCARDABLE 63,20,78,127
STYLE DS_MODALFRAME ¶ WS_OVERLAPPED ¶ WS_CAPTION ¶ WS_SYSMENU
FONT 8, "Helv"
§
DEFPUSHBUTTON "OK",2,16,108,45,13
LISTBOX 609,7,19,64,82,LBS_STANDARD ¶ WS_TABSTOP
CTEXT "Files being deleted:", -1,4,7,69,10
†
DIR_SELECT DIALOG LOADONCALL MOVEABLE DISCARDABLE 15,20,147,116
STYLE DS_MODALFRAME ¶ WS_OVERLAPPED ¶ WS_CAPTION ¶ WS_SYSMENU
FONT 8, "Helv"
§
EDITTEXT 101,42,5,98,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
†

```

```

DEFPUSHBUTTON "OK",1,88,22,50,14
LISTBOX 103,6,30,64,82,LBS_STANDARD ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,88,41,50,14
LTEXT "D&irectories:",-1,6,18,64,10
LTEXT "&Directory:",-1,6,6,36,10
†
DONE DIALOG LOADONCALL MOVEABLE DISCARDABLE 21,32,207,54
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "CMCCODE - Done!"
FONT 8,"MS Sans Serif"
§
CTEXT "",101,12,14,184,9
CONTROL "",1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 6,6,195,25
DEFPUSHBUTTON "OK",2,64,36,78,13
†
DONE_SHOW DIALOG LOADONCALL MOVEABLE DISCARDABLE 21,32,207,54
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "CMCCODE - Done!"
FONT 8,"MS Sans Serif"
§
DEFPUSHBUTTON "OK",2,18,36,78,13
PUSHBUTTON "&View Report File",1,111,36,78,13
CTEXT "",101,12,14,184,9
CONTROL "",1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 6,6,195,25
†
DRAGDROP DIALOG LOADONCALL MOVEABLE DISCARDABLE 119,85,139,110
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Interactive Drag & Drop"
FONT 8,"MS Sans Serif"
§
DEFPUSHBUTTON "OK",1,18,92,45,13
RADIOBUTTON "&Encode",802,13,39,48,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "&Decode",803,13,53,48,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "E&xt Based",804,13,67,48,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
CHECKBOX "&Zip First",805,75,39,54,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "U&NZIP After",806,75,53,54,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "&Winsort First",807,75,67,54,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,75,92,45,13
†

```

```

GROUPBOX "Drop to:",101,7,26,57,57,BS_GROUPBOX
GROUPBOX "Options:",102,70,26,63,57,BS_GROUPBOX
COMBOBOX 801,69,7,64,66,CBS_DROPDOWNLIST ¶ WS_VSCROLL ¶ WS_TABSTOP
LTEXT "CMC Method:", -1,6,10,60,8
†
ENC_CONFIG DIALOG LOADONCALL MOVEABLE DISCARDABLE 10,23,262,189
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Encode Options"
FONT 8, "MSSans Serif"
§
DEFPUSHBUTTON "OK",1,206,9,46,13
CHECKBOX "&Line CheckSums",201,12,9,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "&File CheckSums",202,12,24,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "Fil&e Headers",203,12,39,72,12
CHECKBOX "File Desc&ription",204,12,54,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "Des&criptive Name",205,12,69,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "I&ncude Table",206,90,9,72,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "Make E&MBL Files",207,90,24,72,12
CHECKBOX "Sin&gle File",208,90,39,72,12
CHECKBOX "All&In One File",209,90,54,72,12
CHECKBOX "Number b&y Ext.",210,90,69,72,12
EDITTEXT 211,123,90,42,12
EDITTEXT 212,123,107,42,12
RADIOBUTTON "Def&ault to location of input file",213,12,138,132,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "User select &on Encode",214,12,152,132,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "&Set:",215,12,166,27,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
EDITTEXT 216,42,166,105,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" 217,150,166,12,13
COMBOBOX 218,213,90,42,57,CBS_DROPDOWNLIST ¶ WS_VSCROLL ¶ WS_TABSTOP
COMBOBOX 219,213,107,42,39,CBS_DROPDOWNLIST ¶ WS_VSCROLL ¶ WS_TABSTOP
RADIOBUTTON "&Wincode select",220,177,148,69,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "&User select",221,177,164,69,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,206,27,46,13
PUSHBUTTON "&Default",222,206,45,46,13
PUSHBUTTON "&Help",223,206,63,46,13
CONTROL "",1,"STATIC",SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 6,6,159,78
LTEXT "Bytes per File (Lines/File):", 103,6,93,114,8
LTEXT "Extension for Encoded Files:",104,6,110,108,8

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GROUPBOX "Encoded File Name",102,171,132,84,51,BS\_GROUPBOX  
GROUPBOX "Encoded File Directory",101,6,123,159,60,BS\_GROUPBOX  
LTEXT "Code Type:",105,171,93,39,8  
LTEXT "File Type:",-1,171,110,39,8  
†  
EXT\_INFO DIALOG LOADONCALL MOVEABLE DISCARDABLE 76,55,207,111  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "More About CMCCODE"  
FONT 8, "MS Sans Serif"  
§  
DEFPUSHBUTTON "OK",2,81,93,45,13  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 6,6,195,81  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 13,57,180,1  
LTEXT "CMCCODE Version:",-1,15,12,72,8  
LTEXT "WCodeDLL Version:",-1,15,23,72,8  
LTEXT "HookDLL Version:",-1,15,34,72,8  
LTEXT "Release Date:",-1,15,45,72,8  
LTEXT "Memory:",-1,15,62,72,8  
LTEXT "System Resources:",-1,15,73,72,8  
LTEXT "",701,90,12,105,8  
LTEXT "",702,90,23,105,8  
LTEXT "",703,90,34,105,8  
LTEXT "",704,90,45,105,8  
LTEXT "",705,90,62,105,8  
LTEXT "",706,90,73,105,8  
†  
EXT\_INFO DIALOG LOADONCALL MOVEABLE DISCARDABLE 76,55,207,111  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "More About CMCCODE"  
FONT 8, "MS Sans Serif"  
§  
DEFPUSHBUTTON "OK",2,81,93,45,13  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 6,6,195,81  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 13,57,180,1  
LTEXT "CMCCODE Version:",-1,15,12,72,8  
LTEXT "WCodeDLL Version:",-1,15,23,72,8  
LTEXT "HookDLL Version:",-1,15,34,72,8  
LTEXT "Release Date:",-1,15,45,72,8

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LTEXT "Memory:",-1,15,62,72,8
LTEXT "System Resources:", -1, 15, 73, 72, 8
LTEXT "",701,90,12,105,8
LTEXT "",702,90,23,105,8
LTEXT "",703,90,34,105,8
LTEXT "",704,90,45,105,8
LTEXT "",705,90,62,105,8
LTEXT "",706,90,73,105,8
†
FILE_O_ZIP DIALOG LOADONCALL MOVEABLE DISCARDABLE 40,20,202,130
STYLE DS_MODALFRAME ¶ WS_OVERLAPPED ¶ WS_CAPTION ¶ WS_SYSMENU
FONT 8, "Helv"
§
EDITTEXT 100,42,6,98,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
DEFPUSHBUTTON "OK",1,146,5,50,14
LISTBOX 102,6,44,64,82,LBS_STANDARD ¶ LBS_MULTIPLESEL ¶ LBS_EXTENDEDSEL ¶ WS_TABSTOP
LISTBOX 103,76,44,64,82,LBS_STANDARD ¶ WS_TABSTOP
PUSHBUTTON "&All Files",104,146,45,50,14
PUSHBUTTON "&Clipboard", 105,146,63,50,14
CHECKBOX "&ZIP First",106,146,81,51,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,146,23,50,14
LTEXT "File&name:",-1,6,8,36,10
LTEXT "Directory:",-1,6,20,36,10
LTEXT "",101,42,20,98,10
LTEXT "&Files:",-1,6,32,64,10
LTEXT "&Directories:",-1,76,32,64,10
PUSHBUTTON "&Options...",107,146,105,50,14
†
FILE OPEN DIALOG LOADONCALL MOVEABLE DISCARDABLE 40,20,202,130
STYLE DS_MODALFRAME ¶ WS_OVERLAPPED ¶ WS_CAPTION ¶ WS_SYSMENU
FONT 8, "Helv"
§
EDITTEXT 100,42,6,98,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
DEFPUSHBUTTON "OK",1,146,5,50,14
LISTBOX 102,6,44,64,82,LBS_STANDARD ¶ WS_TABSTOP
LISTBOX 103,76,44,64,82,LBS_STANDARD ¶ WS_TABSTOP
PUSHBUTTON "Cancel",2,146,23,50,14
LTEXT "File&name:",-1,6,8,36,10

```

©

§

```

LTEXT "Directory:", -1, 6, 20, 36, 10
LTEXT "", 101, 42, 20, 98, 10
LTEXT "&Files:", -1, 6, 32, 64, 10
LTEXT "&Directories:", -1, 76, 32, 64, 10
†
HEADER_TYPE DIALOG LOADONCALL MOVEABLE DISCARDABLE 93,54,111,81
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Header Type"
FONT 8, "MS Sans Serif"
§
DEFPUSHBUTTON "OK", 1, 6, 63, 45, 13
RADIOBUTTON "&Wincode Standard", 224, 12, 10, 87, 12, BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "&MIME Conformant", 225, 12, 25, 87, 12, BS_AUTORADIOBUTTON ¶ WS_TABSTOP
PUSHBUTTON "Cancel", 2, 60, 63, 45, 13
GROUPBOX "", 106, 6, 2, 99, 54, BS_GROUPBOX
CHECKBOX "&Guess Content-Type", 226, 12, 40, 87, 12, BS_AUTOCHECKBOX ¶ WS_TABSTOP
†
HOOK_APP DIALOG LOADONCALL MOVEABLE DISCARDABLE 10,74,277,117
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Hook Application Options"
FONT 8, "MS Sans Serif"
§
DEFPUSHBUTTON "OK", 1, 222, 9, 45, 13
EDITTEXT 901, 75, 6, 135, 12, ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
EDITTEXT 902, 75, 24, 120, 12, ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" 903, 198, 24, 12, 13
CHECKBOX "&Case Sensitive Application Name", 904, 80, 45, 126, 12, BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "&Prompt for Application on Hook", 905, 80, 57, 126, 12, BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "H&ide Wincode when Hooked", 906, 80, 69, 126, 12, BS_AUTOCHECKBOX ¶ WS_TABSTOP
CHECKBOX "&Auto-Hook Wincode on Startup", 907, 80, 81, 126, 12, BS_AUTOCHECKBOX ¶ WS_TABSTOP
PUSHBUTTON "&Tune..." 910, 222, 97, 45, 13
PUSHBUTTON "Cancel", 2, 222, 27, 45, 13
PUSHBUTTON "&Default", 908, 222, 45, 45, 13
PUSHBUTTON "&Help", 909, 222, 63, 45, 13
LTEXT "Application Name:", -1, 7, 10, 66, 8
LTEXT "Application Path:", -1, 7, 27, 66, 8
CONTROL "", 1, "STATIC", SS_BLACKFRAME ¶ WS_CHILD ¶ WS_VISIBLE, 75, 42, 135, 54
ICON "THOOK_ICON", -1, 27, 69, 18, 20

```

LTEXT "Advanced Options.", -1, 7, 45, 66, 8  
LTEXT "If you are having problems Hooking an application, try this ----c", -1, 7, 100, 213, 8  
+  
HOOK\_TUNE DIALOG LOADONCALL MOVEABLE DISCARDABLE 81, 74, 151, 96  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "Hook Tuning"  
FONT 8, "MS Sans Serif"  
§  
DEFPUSHBUTTON "OK", 1, 24, 78, 45, 13  
CHECKBOX "&Create Window List on Hook", 911, 12, 11, 126, 12, BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
CHECKBOX "&Skip Opening Window", 912, 12, 25, 90, 12, BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
EDITTEXT 913, 108, 39, 30, 12  
COMBOBOX 914, 108, 54, 30, 39, CBS\_DROPDOWNLIST ¶ WS\_TABSTOP  
PUSHBUTTON "Cancel", 2, 81, 78, 45, 13  
CONTROL "", 1, "STATIC", SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 6, 6, 138, 66  
LTEXT "Set Hook Delay (seconds).", -1, 12, 42, 93, 8  
LTEXT "Set Hook Menu Range:", -1, 12, 57, 93, 8  
+  
MEMORY\_SWAP DIALOG LOADONCALL MOVEABLE DISCARDABLE 63, 65, 132, 66  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "CMCCODE - Memory Swap"  
FONT 8, "MS Sans Serif"  
§  
EDITTEXT 101, 37, 30, 28, 12, ES\_AUTOHSCROLL ¶ WS\_BORDER ¶ WS\_TABSTOP  
DEFPUSHBUTTON "OK", 1, 12, 48, 45, 13  
PUSHBUTTON "Cancel", 2, 75, 48, 45, 13  
CTEXT "Enter a memory allocation swap", -1, 6, 7, 120, 9  
CTEXT "value (range + 256KB to 16MB):", -1, 6, 16, 120, 9  
LTEXT "KBytes", -1, 68, 32, 27, 8  
+  
OPT\_TOOLBAR DIALOG LOADONCALL MOVEABLE DISCARDABLE 102, 57, 104, 112  
STYLE WS\_POPUP ¶ WS\_VISIBLE ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "Options Toolbar"  
FONT 8, "MS Sans Serif"  
§  
PUSHBUTTON "&Encode...", 1001, -1, 0, 105, 14  
PUSHBUTTON "&Decode...", 1002, -1, 14, 105, 14  
PUSHBUTTON "&Wincode...", 1003, -1, 28, 105, 14  
+  
§

PUSHBUTTON "W&insert..." ,1004,-1, 42, 105, 14  
PUSHBUTTON "&Viewer..." ,1005,-1, 56, 105, 14  
PUSHBUTTON "&ZIP/UNZIP...",1006,-1, 70, 105, 14  
PUSHBUTTON "&Hook App...",1007,84,105,14  
PUSHBUTTON "E&xit Toolbar", 2, -1, 98, 105, 14  
†  
ORDER\_HELP DIALOG LOADONCALL MOVEABLE DISCARDABLE 61,21,228,258  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "Ordering the Help file"  
FONT 8, "MSSans Serif"  
§  
DEFPUSHBUTTON "THANKS!",2, 77, 240, 75, 13  
LTEXT "To order the Wincode Help file, send \$5.00(U.S. Dollars) to: ",-1, 13, 9, 204, 8  
CTEXT "CMC Interactive®xAE", -1, 58, 21, 114, 8  
CTEXT "8S. Michigan Ave.",-1, 58, 29, 114, 8  
CTEXT "Suite 2003",-1, 58, 37, 114, 8  
CTEXT "Chicago, IL 60606",-1, 58, 45, 114, 8  
LTEXT "This price and address are guaranteed until 6/1/95. If you",-1, 13, 57, 204, 8  
LTEXT "wish to obtain the Help file after this date, please e-mail",-1, 13, 65, 204, 8  
LTEXT "first for updated information. Make checks payable to:",-1, 13, 73, 204, 8  
CTEXT "CMC Interactive", -1, 13, 83, 204, 8  
LTEXT "By ordering Help, you obtain the following:",-1, 13, 112, 204, 8  
LTEXT " 1)The most recent version of Wincode with the Help file",-1, 13, 122, 204, 8  
LTEXT " 2)Directly e-mailed pre-releases of future versions of",-1, 13, 130, 204, 8  
LTEXT " 3)Wincode and the Help file",-1, 13, 138, 204, 8  
LTEXT " 4)E-mail (only) technical support",-1, 13, 146, 204, 8  
LTEXT "All files will be ELECTRONICALLY MAILED to you. If you",-1, 13, 162, 204, 8  
LTEXT "wish to have something sent through the US Postal service.",-1, 13, 170, 204, 8  
LTEXT "please include a Self-Addressed-STAMPED Disk Mailer AND",-1, 13, 178, 204, 8  
LTEXT "Disk with your order. Multi-User pricing is available.",-1, 13, 186, 204, 8  
LTEXT " Main Internet Address: cmcinter@suba.com", -1, 13, 203, 204, 8  
LTEXT " America Online: cmcinter@aol.com", -1, 13, 214, 204, 8  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 6, 6, 216, 228  
ICON "MAIN\_ICON",-1, 25, 27, 18, 20, SS\_ICON ¶ WS\_GROUP  
ICON "ORDER\_HELP\_ICON", -1, 187, 27, 18, 20, SS\_ICON ¶ WS\_GROUP  
CTEXT "PLEASE" include a LEGIBLE E-MAIL address with all orders.",-1, 13, 98, 204, 8  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 16, 158, 198, 1  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 16, 93, 198, 1

CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 16,109,198,1  
SEQUENCE DIALOG LOADONCALL MOVEABLE DISCARDABLE 27,37,237,147  
STYLE DS\_MODALFRAME ¶ WS\_POPUP¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "Concatenate Files"  
FONT 8, "MS Sans Serif"  
§  
EDITTEXT 750,6,16,168,12  
DEFPUSHBUTTON "OK",1,183,9,45,13  
PUSHBUTTON "< &Encode",756,183,67,45,13  
PUSHBUTTON "< &Decode",757,183,85,45,13  
LISTBOX 751,6,44,64,82,LBS\_STANDARD ¶ WS\_TABSTOP  
PUSHBUTTON "<c",752,77,65,18,13  
PUSHBUTTON "\_-",753,77,88,18,13  
LISTBOX 754,111,44,64,82,LBS\_STANDARD ¶ WS\_TABSTOP  
PUSHBUTTON "Cancel",2,183,27,45,13  
PUSHBUTTON "&Help",755,183,45,45,13  
LTEXT "Concatenate all files into:",-1,6,6,87,8  
LTEXT "Files:",-1,6,33,63,8  
LTEXT "Sequence:",-1,111,33,63,8  
CTEXT "1",-1,99,45,10,8  
CTEXT "2",-1,99,53,10,8  
CTEXT "3",-1,99,61,10,8  
CTEXT "4",-1,99,69,10,8  
CTEXT "5",-1,99,77,10,8  
CTEXT "6",-1,99,85,10,8  
CTEXT "7",-1,99,93,10,8  
CTEXT "8",-1,99,101,10,8  
CTEXT "9",-1,99,109,10,8  
RTEXT "...",-1,99,117,10,8  
LTEXT "Status:",-1,6,132,27,8  
LTEXT "",758,36,132,195,8  
PUSHBUTTON "<c", 759,77,45,18,13  
PUSHBUTTON "\_",760,77,109,18,13  
LTEXT "Count:",-1,183,118,24,8  
LTEXT "",761,210,118,21,8  
LTEXT "File",-1,183,109,48,8

WIN\_CONFIG DIALOG LOADONCALL MOVEABLE DISCARDABLE 25,21,267,186  
STYLE DS\_MODALFRAME ¶ WS\_POPUP ¶ WS\_CAPTION ¶ WS\_SYSMENU  
CAPTION "CMCCODE Options"  
FONT 8, "MS Sans Serif"  
§  
DEFPUSHBUTTON "OK",1,213,9,45,13  
CHECKBOX "C&reate Report File",401,12,9,78,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
CHECKBOX "St&art as Icon",402,12,23,78,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
CHECKBOX "Auto File & Overwrite",403,12,37,78,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
CHECKBOX "A&lwaysOn Top",405,93,9,75,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
CHECKBOX "Close When Do&n",406,93,23,75,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
CHECKBOX "&Memory Swapping",407,93,37,75,12  
CHECKBOX "W&insert First",408,93,51,75,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
COMBOBOX 409,117,72,54,39,CBS\_DROPDOWNLIST ¶ WS\_VSCROLL ¶ WS\_TABSTOP  
COMBOBOX 410,117,87,54,39,CBS\_DROPDOWNLIST ¶ WS\_VSCROLL ¶ WS\_TABSTOP  
EDITTEXT 411,12,114,141,9,ES\_AUTOHSCROLL ¶ NOT WS\_BORDER ¶ WS\_TABSTOP  
PUSHBUTTON "?",412,156,110,12,13  
EDITTEXT 413,15,156,148,21,ES\_MULTILINE ¶ WS\_BORDER ¶ WS\_VSCROLL ¶ WS\_TABSTOP  
RADIOBUTTON "&Wincode Default",414,183,94,69,12,BS\_AUTORADIOBUTTON ¶ WS\_GROUP ¶ WS\_TABSTOP  
RADIOBUTTON "&Custom:",415,183,109,39,12,BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
EDITTEXT 416,224,109,30,12  
RADIOBUTTON "&Standard (Default)",417,183,146,75,12,BS\_AUTORADIOBUTTON ¶ WS\_GROUP ¶ WS\_TABSTOP  
RADIOBUTTON "Cus&tom:",418,183,163,39,12,BS\_AUTORADIOBUTTON ¶ WS\_TABSTOP  
EDITTEXT 419,224,163,30,12  
CHECKBOX "DOS Attri&utes",404,12,51,78,12,BS\_AUTOCHECKBOX ¶ WS\_TABSTOP  
PUSHBUTTON "Cancel",2,213,27,45,13  
PUSHBUTTON "&Defaults",420,213,45,45,13  
PUSHBUTTON "&Help",421,213,63,45,13  
GROUPBOX "Working Directory",103,6,102,165,24,BS\_GROUPBOX  
LTEXT "Enter sixty-four valid ASCII characters.",-1,15,145,132,9  
CONTROL "",1,"STATIC",SS\_BLACKFRAME ¶ WS\_CHILD ¶ WS\_VISIBLE, 6,6,165,60  
GROUPBOX "Mode",101,177,81,84,45,BS\_GROUPBOX  
GROUPBOX "Line Length",102,177,130,84,51,BS\_GROUPBOX  
GROUPBOX "Code Table",-1,6,130,165,51,BS\_GROUPBOX  
LTEXT "Interactive Mode Setting:",-1,6,90,90,8  
LTEXT "Sound Effects Setting:",-1,6,76,81,8  
†  
WIN\_CONFIG DIALOG LOADONCALL MOVEABLE DISCARDABLE 22,38,255,159  
§

```

STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "Winsort Options"
FONT 8, "MSSans Serif"
§
DEFPUSHBUTTON "OK",1,201,9,45,13
EDITTEXT 501,42,19,126,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
EDITTEXT 502,42,35,126,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
CHECKBOX "&Use Custom BEGIN/END", 503,12,54,123,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
EDITTEXT 504,12,93,117,9,ES_AUTOHSCROLL ¶ NOT WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" 505,132,89,12,13
EDITTEXT 506,12,121,117,9,ES_AUTOHSCROLL ¶ NOT WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" 507,132,117,12,13
CHECKBOX "Execute Winsort in Silent & Mode", 508,9,140,138,12,BS_AUTOCHECKBOX ¶ WS_TABSTOP
RADIOBUTTON "&Standard Winsort", 509,159,95,75,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "Flush&Left ONLY", 510,159,110,75,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "Flush Left and Sort", 511,159,125,75,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
EDITTEXT 512,216,139,24,12
PUSHBUTTON "Cancel",2,201,27,45,13
PUSHBUTTON "&Defaults",513,201,45,45,13
PUSHBUTTON "&Help",514,201,63,45,13
LTEXT "END:",-1,12,38,24,8
LTEXT "BEGIN:",-1,12,22,27,8
GROUPBOX "Sort Options", 101,153,81,96,72,BS_GROUPBOX
GROUPBOX "Custom BEGIN/END", -1,6,6,168,66,BS_GROUPBOX
GROUPBOX "Winsort Executable", 102,6,81,141,24,BS_GROUPBOX
GROUPBOX "Winsort Directory", 103,6,109,141,24,BS_GROUPBOX
LTEXT "Flush # Chars:",-1,159,141,54,8
†
Z_DZ_CONFIG DIALOG LOADONCALL MOVEABLE DISCARDABLE 27,24,240,151
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "ZIP/UNZIP Options"
FONT 8, "MSSans Serif"
§
DEFPUSHBUTTON "OK",1,186,9,45,13
EDITTEXT 601,69,6,90,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" ,602,162,5,12,13
EDITTEXT 603,69,23,105,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
EDITTEXT 604,69,39,90,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP

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```

PUSHBUTTON "?" ,605,162,38,12,13
EDITTEXT 606,69,55,105,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
EDITTEXT 607,102,71,33,12
RADIOBUTTON "Def&ault to location of input file" ,608,12,100,132,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "User select &on UNZIP" ,609,12,114,132,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "&Set:" ,610,12,128,27,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
EDITTEXT 611,42,128,99,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
PUSHBUTTON "?" ,612,144,128,12,13
RADIOBUTTON "&Normal" ,613,171,100,57,12,BS_AUTORADIOBUTTON ¶ WS_GROUP ¶ WS_TABSTOP
RADIOBUTTON "&Minimized" ,614,171,114,57,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
RADIOBUTTON "Hidd&en" ,615,171,128,57,12,BS_AUTORADIOBUTTON ¶ WS_TABSTOP
PUSHBUTTON "Cancel" ,2,186,27,45,13
PUSHBUTTON "&Defaults" ,616,186,45,45,13
PUSHBUTTON "&Help" ,617,186,63,45,13
GROUPBOX "UNZIPped File(s) Directory" ,101,6,87,153,57,BS_GROUPBOX
GROUPBOX "Show Options" ,102,165,87,69,57,BS_GROUPBOX
LTEXT "ZIP Filename:" ,-1,6,10,57,8
LTEXT "ZIP Param(s):" ,-1,6,26,57,8
LTEXT "UNZIP Filename:" ,-1,6,42,60,8
LTEXT "UNZIP Param(s):" ,-1,6,58,60,8
LTEXT "Extension for ZIPPED Files:" ,-1,6,74,93,8
†
ZIP_NAME DIALOG LOADONCALL MOVEABLE DISCARDABLE 35,31,132,60
STYLE DS_MODALFRAME ¶ WS_POPUP ¶ WS_CAPTION ¶ WS_SYSMENU
CAPTION "CMCCODE - ZIP Filename"
FONT 8,"MS Sans Serif"
§
EDITTEXT 101,31,23,51,12,ES_AUTOHSCROLL ¶ WS_BORDER ¶ WS_TABSTOP
DEFPUSHBUTTON "OK" ,1,12,42,45,13
PUSHBUTTON "Cancel" ,2,75,42,45,13
CTEXT "Enter a filename for the ZIP archive:" ,-1,4,7,123,9
LTEXT "" ,102,84,25,24,8
†
STRINGTABLE LOADONCALL MOVEABLE DISCARDABLE
§
101,"Encode a data file..."
102,"Decode a data file..."
103,"Concatenate multiple files into a single file (specific ordering)..."
```

104, "View a Wincode Report file..."  
105, "Clean Wincode directories by deleting files..."  
106, "Set Encode options..."  
107, "Set Decode options..."  
108, "Set General Wincode options..."  
109, "Set Winsort options..."  
110, "Select a Report File viewer..."  
111, "Set PKZIP/UNZIP options..."  
†  
STRINGTABLE LOADONCALL MOVEABLE DISCARDABLE  
§  
112, "Set the Application Hook options..."  
113, "Wincode Help Contents..."  
114, "Help file Keyword Search..."  
115, "Help on using Windows Help files..."  
116, "Wincode Internet Frequency Asked Questions..."  
117, "Legal Copyrights for files..."  
118, "Information on ordering the Wincode Help file..."  
119, "Version and Author information..."  
121, "Set Wincode Interactive Drag & Drop Mode..."  
122, "Hook the Wincode Menu into a selected application..."  
123, "Select the Options Toolbar to configure Wincode..."  
124, "Exit the Wincode program..."  
125, "Stop the current Operation..."  
126, "Quit the entire Operation..."  
127, "Encode, Decode, Exit..."  
†  
STRINGTABLE LOADONCALL MOVEABLE DISCARDABLE  
§  
128, "Concat, View, Clean, Drag&Drop Mode, Hook..."  
129, "Encode, Decode, Wincode, Winsort, Viewer, PKZIP/UNZIP, Hook App..."  
130, "Help and related information..."  
†  
CLEAN\_DOWN ICON LOADONCALL MOVEABLE DISCARDABLE

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The following is a second software listing for the catcher program of the invention.

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```

/*
-----  

File:      npshell.cpp  

Advanced Features:  

    * HyperCD HTML command (H20) set  

    * stream capture  

    * encryption/decryption  

    * file handling  

    * multimedia io  

Programmer: Plugin Empty Shell,          Netscape  

            Encryption/Decryption,   Planet Graphics  

            Multimedia IO          Planet Graphics  

-----  

//  

//  

//  

// HyperCD  

//  

// The architecture of HyperCD allows for  

// authorized and secure rendering of encrypted multimedia  

// from the fastest link. Such media may reside on a HyperCD  

// CD-ROM, a server thru broad-band fiber optics or satellite streaming  

// for speedy access. The encrypted HyperCD media is protected  

// by crippling the media. Only authorized user can obtain  

// trigger/keys from the server to unlock the HyperCD media.  

//  

//  

//  

//  

//  

// The shell file defines a "shell" plugin that can be used as the  

// basis for a real plugin. This shell just provides empty  

// implementations of all functions that the plugin can implement  

// that will be called by Netscape (the NPP_xxx methods defined in  

// npapi.h).  

//  

//  

//  

#ifndef _WIN32  

#define _WIN32  

#endif  

#ifndef _NPAPI_H_  

#include "npapi.h"  

#include "plgwnd.h"  

#include "CHyperCD.h"  

#endif  

// mmio  

#include <mmSystem.h>  

#include <qtw.h>  

#include <string.h>  

#include <io.h>  

#include <fcntl.h>  

#include <sys/stat.h>  

#include "xsystem.h"  

HRESULT CALLBACK WndProc (HWND hWnd, UINT message, WPARAM wParam, LPARAM lParam);  

-----  

// SysIO:  

//  

void SysIO(char *szSYSFILE)  

{  

char    szFileContent[MAXDIRCHAR];  

char    szMsg[MAX_STR*100];  

int     hFile, nRead, nFileLength;  

int     nLoc=0,i,ret;  

char    *pTemp;  

if( (hFile = _open(szSYSFILE, _O_RDONLY|_O_BINARY, _S_IREAD )) != -1 )  


```

```

{
nFileLength=(int)_filelength( hFile );
nRead = _read(hFile, szFileContent, (unsigned int )nFileLength );
_close( hFile );
szFileContent[nFileLength-2] ='\0';
nFileLength -= 2;
SysFileControl(szFileContent,nFileLength, DEFAULT);
pTemp=szFileContent;

for(i=nDirItem=0;i<MAXDIRITEM;i++)
{
    ret=sscanf(pTemp,"%s",szMsg);
    if(ret ==0)
        continue;
    else if(ret == EOF)
        break;

    //not newline char
    if((strcmp(szMsg,"\\n") != 0) && (strlen(szMsg)>0))
    {
        strcpy(Dir[nDirItem],szMsg);
        nDirItem++;
    }
    nLoc=strcspn(pTemp, "\\n" );
    pTemp = pTemp+nLoc+1;
    if(pTemp > szFileContent+nFileLength)
        break;
}
else
{
    MessageBox(NULL,MISSDBFILE,"Error",MB_OK);
    return;
}

//-----
// NPP_Initialize:
//-----

NPError NPP_Initialize(void)
{
    return NPERR_NO_ERROR;
}

//-----
// NPP_Shutdown:
//-----


void NPP_Shutdown(void)
{
    return;
}

//-----
// NPP_New:
//-----


NPError NP_LOADDS
NPP_New(NPMIMEType pluginType,
        NPP instance,
        uint16 mode,
        int16 argc,
        char* argv[],
        char* argc[],
        NPSavedData* saved)
{
    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;

    instance->pdata = NPN_MemAlloc(sizeof(PluginInstance));
    PluginInstance* This = (PluginInstance*) instance->pdata;
    if (This != NULL)

```

```

{
    This->window = NULL;
    This->cHypercd = new CHyperCD();
    This->mode = mode;

    This->bAutoStart = FALSE;
    This->bLoop = FALSE;

    int idx;char msg[MAX_STR], sSYSFILE[MAX_STR];
    strcpy(msg,"");
    strcpy(sSYSFILE,SYSFILE);
    char *p1,*p2, cd_title[MAX_STR];

    // parsing the web page embed tag and set hypercd tags
    for (idx =0; idx<argc; idx++) {
        if(strcmp(strupr(argv[idx]),"SRC")==0)
        {
            p2=strstr(strupr(argv[idx]),".Q");
            if(p2==NULL)
            {
                MessageBox(NULL,argv[idx],"Missing .q in file name",MB_OK);
                return 0;
            }

            while((*p2 != '_')&&(p2> argv[idx]))
                p2--;
            if(*p2 == '_')
            {
                p1=--p2;

                while((*p1 != '\\') || (*p1 != '/')&&(p1> argv[idx]))
                    p1--;

                for(int i=0;i<=(int)(p2-p1);i++)
                    cd_title[i]=*(p1+i);
                cd_title[i]='\000';
                strcpy(sSYSFILE,"c:\\hypercd\\");
                strcat(sSYSFILE,cd_title);
                strcat(sSYSFILE,".xdb");
                break;
            }
        }
    }

    SysIO(sSYSFILE);

    for (idx =0; idx<argc; idx++) {
        if (!strcmpi(argv[idx],"autostart")) {
            if (!strcmpi(argv[idx],"true")) {
                This->bAutoStart = TRUE;
                PGZInfo.tag |= PGZEMBED_AUTO_START;
            }
        }

        if (!strcmpi(argv[idx],"loop")) {
            if (!strcmpi(argv[idx],"true")) {
                This->bLoop = TRUE;
            }
        }

        if (!strcmpi(argv[idx],"speaker")) {
            if (!strcmpi(argv[idx],"off"))
                PGZInfo.tag |= PGZEMBED_NO_SPEAKER ;
        }
    }

    /* Features to be implemented
    other HyperCD HTML command (H20) set:
    button=true/false
    desolve/etc
    */
}

instance->pdata = This; // save my data pointer in the instance pdata pointer
                        // this will be passed back to me in all calls so that I
                        // can extract it later
return NPERR_NO_ERROR;
}

```

```

}
else
    return NPERR_OUT_OF_MEMORY_ERROR;
}

static void UnSubclass(PluginInstance *This)
{
    WNDPROC      OldWndProc;
    WNDPROC*     lplpfn = This->window->GetSuperWndProcAddr();

    if ( !*lplpfn )
    {
        ASSERT(0);
        return;
    }

    // Set the original window procedure
    OldWndProc = (WNDPROC)::SetWindowLong( This->window->m_hWnd,
                                            GWL_WNDPROC, (LONG) *lplpfn );

    // A subclassed window's procedure is always AfxWndProc.
    // If this is not TRUE, then it's not a subclassed window.
    if ( OldWndProc != AfxWndProc )
        ASSERT(0);
}

static void KillHyperCDWindow(PluginInstance *This)
{
    if (This->cHypercd) {
        This->cHypercd->Close();
        delete This->cHypercd;
        This->cHypercd = NULL;

        // deallocate all QT etc resources
        CleanupMultimedia();
    }

    // remove This
    UnSubclass(This);

    if (This->window) {
        This->window->Detach();
        delete This->window;
        This->window = NULL;
    }
}

-----
// NPP_Destroy:
-----
NPError NP_LOADDS
NPP_Destroy(NPP instance, NPSavedData** save)
{
    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;

    PluginInstance* This = (PluginInstance*) instance->pdata;

    //
    // Note: If desired, call NP_MemAlloc to create a
    // NPSavedData structure containing any state information
    // that you want restored if this plugin instance is later
    // recreated.
    //
}

```

```

if (This != NULL)
{
    KillHyperCDWindow(This);
    NPN_MemFree(instance->pdata);
}

return NPERR_NO_ERROR;
}

//-----
// NPP_SetWindow:
//-----
NPError NP_LOADDS
NPP_SetWindow(NPP instance, NPWindow* np_window)
{
    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;

    PluginInstance* This = (PluginInstance*) instance->pdata;

    // Note: Before setting fWindow to point to the
    // new window, you may wish to compare the new window
    // info to the previous window (if any) to note window
    // size changes, etc.

    if (!np_window)
        return NPERR_GENERIC_ERROR;

    if (!instance)
        return NPERR_INVALID_INSTANCE_ERROR;

    if (!This)
        return NPERR_GENERIC_ERROR;

    if (!np_window->window && !This->window) // spurious entry
        return NPERR_NO_ERROR;

    if (!np_window->window && This->window)
        // window went away
        KillHyperCDWindow(This);
    return NPERR_NO_ERROR;

    if (!This->window && np_window->window)
    {
        // First time in -- no window created by plugin yet
        This->window = (CPluginWindow *) new CPluginWindow();
        if (!This->window->SubclassWindow((HWND)np_window->window))
        {
            MessageBox(NULL, "SubclassWindow Failed", "HyperCD", MB_OK);
            return NPERR_GENERIC_ERROR;
        }
        // Save This pointer in window class member variable..this lets the
        // window message handling have access to the data pointer easily
        This->window->StoreData(This);
    }

    // resize or moved window (or newly created)
    This->window->InvalidateRect(NULL);
    This->window->UpdateWindow();
    return NPERR_NO_ERROR;
}

//-----
// NPP_NewStream:
//-----
NPError NP_LOADDS
NPP_NewStream(NPP instance,
              NPMIMETYPE type,

```

```

NPStream *stream,
NPBool *scorable,
uint16 *stype)
{

    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;
    PluginInstance* This = (PluginInstance*) instance->pdata;
    *stype = NP_ASFILE;
    return NPERR_NO_ERROR;
}

int32 STREAMBUFSIZE = 0X0FFFFFFF; // If we are reading from a file in NPAsFile
// mode so we can take any size stream in our
// write call (since we ignore it)

-----
// NPP_WriteReady:
-----
int32 NP_LOADDS
NPP_WriteReady(NPP instance, NPStream *stream)
{

    if (instance != NULL)
        PluginInstance* This = (PluginInstance*) instance->pdata;
    return STREAMBUFSIZE; // Number of bytes ready to accept in NPP_Write()
}

-----
// NPP_Write:
-----
int32 NP_LOADDS
NPP_Write(NPP instance, NPStream *stream, int32 offset, int32 len, void *buffer)
{
    if (instance != NULL)
        PluginInstance* This = (PluginInstance*) instance->pdata;
    return len; // The number of bytes accepted
}

-----
// NPP_DestroyStream:
-----
NPError NP_LOADDS
NPP_DestroyStream(NPP instance, NPStream *stream, NPError reason)
{

    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;
    PluginInstance* This = (PluginInstance*) instance->pdata;
    return NPERR_NO_ERROR;
}

void GetFileType(char *szFile,LPPGZInfo lpPGZInfo )
{
    // read PGZ file info:size, version,type, etc
    lpPGZInfo = readPGZInfo(szFile,lpPGZInfo);
}

```

```

//-----
// IOProc:
//-----

LRESULT CALLBACK IOProc(LPMMIOINFO lpMMIOInfo, UINT uMessage, LPARAM lParam1, LPARAM lParam2)
{
    static BOOL alreadyOpened = FALSE;
    PGZINFO PGZInfo;

    PGZInfo.p1=lParam1;
    PGZInfo.p2=lParam2;

    switch (uMessage)
    {
        case MMIOM_OPEN:
            if (alreadyOpened)
                return 0;
            alreadyOpened = TRUE;

            // Determine the size,version,type,etc of the mm file
            GetFileType(MYFILENAME,&PGZInfo);
            PGZIO(PGZIO_OPEN, PGZInfo, lpMMIOInfo);
            return 0;

        case MMIOM_CLOSE:
            PGZIO(PGZIO_CLOSE, PGZInfo, lpMMIOInfo);
            alreadyOpened = FALSE;
            return 0;

        case MMIOM_READ:
            PGZIO(PGZIO_READ,PGZInfo, lpMMIOInfo);
            return (lParam2);

        case MMIOM_SEEK:
            switch (lParam2)
            {
                case SEEK_SET:
                    PGZIO(PGZIO_SEEK_SET,PGZInfo, lpMMIOInfo);
                    break;

                case SEEK_CUR:
                    PGZIO(PGZIO_SEEK_CUR,PGZInfo, lpMMIOInfo);

                case SEEK_END:
                    PGZIO(PGZIO_SEEK_END,PGZInfo, lpMMIOInfo);
                    break;
            }
            return lpMMIOInfo->lDiskOffset;

        default:
            return -1; // Unexpected msgs.
    }
} // end of IOProc
//-----
//-----
int movPlayer(CWnd* pWnd, char * lpszCmdParam, PGZINFO pgzInfo )
{
    OSERR ret;
    LONG lFlags;
    STRING message;
    HWND hWnd;
    MSG msg;
    int i;

    if(pgzInfo.tflag != PZGTYPE_QTPGZ && pgzInfo.tflag != PZGTYPE_QTVIDEO)
        return 0;

    if( pgzInfo.tflag == PZGTYPE_QTPGZ)
        InstallQTPGZware();

    hWnd = pWnd->m_hWnd;
}

```

```

// Establish links to QuickTime for Windows
if (QTInitialize (NULL))
{
    MessageBox (NULL, "QTInitialize failure", "Error", MB_OK);
    return 0;
}
// Allocate memory required for playing movies
if (EnterMovies ())
{
    MessageBox (NULL, "EnterMovies failure", "Error", MB_OK);
    return 0;
}
// Instantiate the movie
if (OpenMovieFile (lpszCmdParam, &mfMovie, OF_READ) != noErr)
{
    MessageBox (NULL, "OpenMovieFile failure", "Error", MB_OK);
    return 0;
}

ret = NewMovieFromFile (&mMovie, mfMovie, NULL, NULL, 0, NULL);
if (ret!=0)
{
    MessageBox (NULL, "NewMovieFromFile failure", "error", MB_OK);
}
ret = CloseMovieFile (mfMovie);
if (ret !=0)
{
    MessageBox (NULL, "CloseMovieFile failure", "Error", MB_OK);
}

// Instantiate the movie controller
GetMovieBox (mMovie, &rcMovie);
OffsetRect(&rcMovie, -rcMovie.left, -rcMovie.top);

mcController = NewMovieController (mMovie, &rcMovie,
    mcTopLeftMovie + mcScaleMovieToFit, (hWnd));
if ( mcController==NULL)
    MessageBox (NULL,"NewMovieController failed", "Error", MB_OK);

// Make the movie paused initially
MCDoAction (mcController, mcActionPlay, 0);

// Eliminate the grow box
SetRectEmpty (&rcMovie);
MCDoAction (mcController, mcActionSetGrowBoxBounds, &rcMovie);

// now set the controller to the parent
RECT recPlugin;
int left,y_value,w,h;
hWndController = GetWindow(hWnd,GW_CHILD);
SetParent(hWndController, GetParent(hWnd));
GetWindowRect(GetParent(hWnd), &recNavigator);
GetWindowRect(hWnd, &recPlugin);
GetWindowRect(hWndController, &rcController);
w=recPlugin.right-recPlugin.left;
h=rcController.bottom-rcController.top;
left = recPlugin.left-recNavigator.left;
y_value =recPlugin.bottom-recNavigator.top;
MoveWindow(hWndController, left,y_value,w,h,1);

// Make the movie active
SetMovieActive (mMovie, TRUE);

// Make the main window visible
ShowWindow (hWnd, SW_SHOW);
UpdateWindow (hWnd);

// new make controller visible
MCSetVisible(mcController, TRUE);

// Hide the speaker button
if(PGZInfo.tag & PGZEMBED_NO_SPEAKER)
{
    MCDoAction (mcController, mcActionGetFlags, (LPVOID) &lFlags);
    lFlags |= mcFlagSuppressSpeakerButton;
}

```

```

    MCDoAction (mcController, mActionSetFlags, (LPVOID) lFlags);
}
// set auto start
if(PGZInfo.tag& PGZEMBED_AUTO_START)
{
    LFIXED lfxRate;
    // Play the movie at the preferred rate
    lfxRate = GetMoviePreferredRate (mMovie);
    MCDoAction (mcController, mcActionPlay, (LPVOID) lfxRate);
}
// controller
OldWndProc2 = (WNDPROC)::SetWindowLong( (hWnd),GWL_WNDPROC, (LONG)WndProc );
return 1;
}

-----
// NPP_StreamAsFile:
-----
int XtractTrigger(const char *szFile, TRIGGERINFO *pTriggerStructure)
{
    FILE* pfFileName1;
    int n;
    *****
        Open trigger file
    *****
    if((pfFileName1=fopen(szFile,"rb")) == NULL)
    {
        MessageBox(NULL,"Error in trigger stream file","Extract Trigger",MB_OK);
        return -1;
    }

    ***** Decrypt the streamed information:
    *****
        Extract information from the trigger file
    Streamed info:
    XKey : security key
    DKey : pointer to lists of uncrippling data keys.
    Counter : usage counter
    MaxCounter: allowable usage,
    -1 for permanent ownership
    *****
    XtractTrigger(pfFileName1, pTriggerStructure);

    *****
        Close trigger file
    *****
    fclose(pfFileName1);
    return 0;
}

-----
// NPP_StreamAsFile:
-----
void NP_LOADDS
NPP_StreamAsFile(NPP instance, NPStream *stream, const char* szStream)
{
    int nTriggerIndex, nType, nRet;
    char szFile[MAX_STR],szMessage[MAX_STR];
    char szMsg[MAX_STR];
    char *pTemp, szPath[MAX_STR];
    STRING szIniStr;
    FILE *pfINIfile;
    PGZINFO PGZInfo;
    TRIGGERINFO TriggerStructure;

    if (instance == NULL)
        return;

    PluginInstance* This = (PluginInstance*) instance->pdata;
    if (This->cHypercd)
    {

```

```

//-----  

//  

//      HyperCD  

//  

// The architecture of HyperCD allows for  

// authorized and secure rendering of encrypted multimedia  

// from the fastest link. Such media may reside on a HyperCD  

// CD-ROM, a server thru broad-band fiber optics or satellite streaming  

// for speedy access. The encrypted HyperCD media is protected  

// by crippling the media. Only authorized user can obtain  

// trigger/keys from the server to unlock the HyperCD media.  

//  

//  

//-----  

// get the initial trigger info  

XtractTrigger(szStream, &TriggerStructure);  

// security exchange & obtain additional pgz-ware  

Xchange(TriggerStructure, &AdditionalStructure);  

// assemble pgz-ware, keys, etc  

Xassemble(PGZInfo,TriggerStructure, AdditionalStructure);  

// obtain HyperCD file path/name/type etc, based upon the trigger/keys etc  

getHyperCDInfo(PGZInfo);  

// determine the external type of the file  

checkFileType(PGZInfo.sFile, &nType);  

// take action  

if(nType == HCD_EXE)  

{
    if(INI_DEBUG )  

        MessageBox(NULL,szFile,"Executing ...",MB_OK);  

    WinExec(szFile,SW_SHOWNORMAL);
    return;
}  

// pgz type  

else if(nType == HCD_PGZ)
{
    PreparePGZIO(szFile);
    GetFileType(szFile,&PGZInfo);

    if(PGZInfo.T==PZGTYPE_AVIVIDEO)
        This->cHypercd->Open(This->window,szMsg,"AVIVideo");

    else if(PGZInfo.T==PZGTYPE_QTVIDEO)
    {
        nRet = movPlayer(This->window, szFile, PGZInfo);
        if(nRet == 0)//fail to open movie
            return;
    }
}
else if(nType == HCD_MOV)
{
    nRet = movPlayer( This->window, szFile, PGZInfo);
    if(nRet == 0)//fail to open movie
        return;
}
else if(nType == HCD MPG)
    This->cHypercd->Open(This->window,szFile,"MPEGVideo");
else
    This->cHypercd->Open(This->window,szFile,"AVIVideo");

if((nType != HCD_PGZ) || (PGZInfo.T!=3)) //not MOV-PGZ
{
    if (This->mode == NP_FULL)
        This->cHypercd->Center();

    This->cHypercd->Update();
    This->cHypercd->Start(This->bLoop);
}

```

```
}
```



```
-----  
// NPP_Print:  
-----  
void NP_LOADDS  
NPP_Print(NPP instance, NPPrint* printInfo)  
{  
    if(printInfo == NULL) // trap invalid param  
        return;  
  
    if (instance != NULL)  
    {  
        PluginInstance* This = (PluginInstance*) instance->pdata;  
  
        if (printInfo->mode == NP_FULL)  
        {  
            //  
            // Note: If your plugin would like to take over  
            // printing completely when it is in full-screen mode,  
            // set printInfo->pluginPrinted to TRUE and print your  
            // plugin as you see fit. If your plugin wants Netscape  
            // to handle printing in this case, set printInfo->pluginPrinted  
            // to FALSE (the default) and do nothing. If you do want  
            // to handle printing yourself, printOne is true if the  
            // print button (as opposed to the print menu) was clicked.  
            // On the Macintosh, platformPrint is a THPrint; on Windows,  
            // platformPrint is a structure (defined in npapi.h) containing  
            // the printer name, port, etc.  
            //  
            void* platformPrint = printInfo->print.fullPrint.platformPrint;  
            NPBool printOne = printInfo->print.fullPrint.printOne;  
  
            printInfo->print.fullPrint.pluginPrinted = FALSE; // Do the default  
        }  
        else // If not fullscreen, we must be embedded  
        {  
            //  
            // Note: If your plugin is embedded, or is full-screen  
            // but you returned false in pluginPrinted above, NPP_Print  
            // will be called with mode == NP_EMBED. The NPWindow  
            // in the printInfo gives the location and dimensions of  
            // the embedded plugin on the printed page. On the Macintosh,  
            // platformPrint is the printer port; on Windows, platformPrint  
            // is the handle to the printing device context.  
            //  
            NPWindow* printWindow = &(printInfo->print.embedPrint.window);  
            void* platformPrint = printInfo->print.embedPrint.platformPrint;  
        }  
    }  
}  
  
-----  
// NPP_HandleEvent:  
// Mac-only.  
-----  
int16 NPP_HandleEvent(NPP instance, void* event)  
{  
    NPBool eventHandled = FALSE;  
    if (instance == NULL)  
        return eventHandled;  
  
    PluginInstance* This = (PluginInstance*) instance->pdata;  
  
    //  
    // Note: The "event" passed in is a Macintosh  
    // EventRecord*. The event.what field can be any of the  
    // normal Mac event types, or one of the following additional
```

```

// types defined in npapi.h: getFocusEvent, loseFocusEvent,
// adjustCursorEvent. The focus events inform your plugin
// that it will become, or is no longer, the recipient of
// key events. If your plugin doesn't want to receive key
// events, return false when passed at getFocusEvent. The
// adjustCursorEvent is passed repeatedly when the mouse is
// over your plugin; if your plugin doesn't want to set the
// cursor, return false. Handle the standard Mac events as
// normal. The return value for all standard events is currently
// ignored except for the key event: for key events, only return
// true if your plugin has handled that particular key event.
//

return eventHandled;
}

//long FAR PASCAL __export WndProc (HWND hWnd, UINT message, WPARAM wParam,LPARAM lParam)
LRESULT CALLBACK WndProc (HWND hWnd, UINT message, WPARAM wParam,LPARAM lParam)
{
PAINTSTRUCT ps;
LONG lFlags;
STRING msg;
int i;
RECT recPlugin;
int left,y_value,w,h;
// Drive the movie controller
if (MCIsPlayerMessage (mcController, hWnd, message, wParam, lParam))
    return 0;

// Process the windows message
switch (message)
{
    case WM_PAINT:
        GetWindowRect(GetParent(hWnd), &recNavigator);
        GetWindowRect(hWnd, &recPlugin);
        w=recPlugin.right-recPlugin.left;
        h=rcController.bottom-rcController.top;
        left = recPlugin.left-recNavigator.left;
        y_value =recPlugin.bottom-recNavigator.top;
        MoveWindow(hWndController, left,y_value,w,h,1);

        if (!BeginPaint (hWnd, &ps))
            return 0;
        EndPaint (hWnd, &ps);
        return 0;

    case WM_DESTROY:
        PostQuitMessage (0);
        return 0;
}
return DefWindowProc (hWnd, message, wParam, lParam);
}

```

File: CHyperCD.cpp

Advanced Features:

This file implements a CHyperCD class which can be used to display HyperCD movie files. This file contains some basic code from the Netscape plugin sdk.

```
-----*/  
#include "stdafx.h"  
#include "CHyperCD.h"  
#include <mmSystem.h>  
  
#ifdef WIN32  
    #include <digitalv.h>  
#endif  
  
#ifdef _DEBUG  
#undef THIS_FILE  
static char BASED_CODE THIS_FILE[] = __FILE__;  
#endif
```

The constructor

```
-----*/  
CHyperCD::CHyperCD ()  
{  
    mOpen = FALSE;  
    mPlaying = FALSE;  
    mDeviceID = 0;  
    mErrorCode = 0;  
    mMCIErrorCode = 0L;  
}  
-----*/
```

```
CHyperCD::~CHyperCD ()  
{  
}
```

This function opens the HyperCD movie file for playback and display the first frame. It requires the HyperCD movie file name and a pointer to the window to draw into

```
-----*/  
BOOL CHyperCD::Open (CWnd *pWnd, CString Filename, CString Type)  
{  
    DWORD RetCode;  
    MCI_ANIM_OPEN_PARMS OpenParms;  
    MCI_ANIM_WINDOW_PARMS WindowParms;  
  
    // Close any device that is already open.  
    if (mDeviceID){  
        Close ();  
    }  
  
    // Open a device for playback.  
    OpenParms.dwCallback = NULL;  
    OpenParms.wDeviceID = 0;  
    OpenParms.lpstrDeviceType = Type;  
    OpenParms.lpstrElementName = Filename.GetBuffer (1);  
    OpenParms.lpstrAlias = "HyperCD"; // can use an array of aliases  
    OpenParms.dwStyle = WS_CHILD | WS_VISIBLE;  
    OpenParms.hWndParent = pWnd->m_hWnd;  
    DWORD flags=(DWORD) MCI_OPEN_ELEMENT | MCI_ANIM_OPEN_PARENT | MCI_ANIM_OPEN_WS;  
    if (Type == "AVIVideo" || Type == "QTWVideo" || Type == "MPEGVideo")
```

```

    flags |= MCI_OPEN_TYPE;
    if (RetCode = mciSendCommand(0, MCI_OPEN, flags, (DWORD) (LPVOID) &uParms)){
        mMCIErrorCode = RetCode;
        char szBuf[256];
        mciGetErrorString(RetCode,szBuf,256);
        char msg[200];
        strcpy(msg, "Error Opening : "); strcat(msg, Filename);
        MessageBox(NULL,szBuf,msg,MB_OK);
        return FALSE;
    }

    // The device was opened, get the device ID.
    mDeviceID = OpenParms.wDeviceID;
    WindowParms.dwCallback = NULL;
    WindowParms.hWnd = pWnd->m_hWnd;
    WindowParms.nCmdShow = SW_SHOW;
    WindowParms.lpstrText = (LPSTR) NULL;
    if (RetCode = mciSendCommand (mDeviceID, MCI_WINDOW, MCI_ANIM_WINDOW_HWND, (DWORD) (LPVOID) &WindowPar
ms)){
        mMCIErrorCode = RetCode;
        return FALSE;
    }
    mMovieWnd = WindowParms.hWnd;

    mOpen = TRUE;
    return TRUE;
}

/*
----- Stop any HyperCD movie, close any open device IDs.
----- */

void CHyperCD::Close (void)
{
    // Closing a device ID will stop the video playback.
    if (mDeviceID)
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);

    mOpen = FALSE;
    mPlaying = FALSE;
}

void CHyperCD::Update ()
{
    MCI_ANIM_UPDATE_PARMS UpdateParams;

    UpdateParams.dwCallback = NULL;
    UpdateParams.hDC = ::GetDC(mMovieWnd);
    if (mDeviceID)
        mciSendCommand (mDeviceID, MCI_UPDATE, MCI_ANIM_UPDATE_HDC, (DWORD) (LPVOID)&UpdateParams);

    ::ReleaseDC(mMovieWnd,UpdateParams.hDC);
    mOpen = FALSE;
    mPlaying = FALSE;
}

/*
----- Start the video playback.
----- This function immediately returns control back to the program.
----- */

BOOL CHyperCD::Start (BOOL bLoop)
{
    DWORD RetCode, dwFlags = 0L;
    MCI_ANIM_PLAY_PARMS PlayParms;

    // Start playback using the MCI_PLAY command.
    PlayParms.dwCallback = NULL;
    PlayParms.dwFrom = PlayParms.dwTo = 0;
}

```

```

#ifdef WIN32
    if (bLoop) dwFlags = MCI_DGV_PLAY | REPEAT;
#endif
    if (RetCode = mciSendCommand (mDeviceID, MCI_PLAY, dwFlags, (DWORD) (LPVOID) &PlayParms)){
        mMCIErrCode = RetCode;
        char szBuf[256];
        mciGetErrorString(RetCode,szBuf,256);
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        mOpen = FALSE;
        return FALSE;
    }
    mPlaying = TRUE;
    return TRUE;
}

BOOL CHyperCD::Realize (void)
{
    // plugins must realize their palette as a background palette
    DWORD RetCode =
        mciSendCommand (mDeviceID, MCI_REALIZE, MCI_ANIM_REALIZE_BKGD, NULL);
    return RetCode;
}

/*
    Pause a video, different from close.
*/

```

---

```

BOOL CHyperCD::Stop (void)
{
    DWORD RetCode;

    Stop playback by sending the MCI_PAUSE command.
    (RetCode = mciSendCommand (mDeviceID, MCI_PAUSE, 0L, NULL)){
        mMCIErrCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        mOpen = FALSE;
        return FALSE;
    }

    mPlaying = FALSE;
    return TRUE;
}

/*
    Rewind the video to the beginning and display the
    first frame.
*/

```

---

```

BOOL CHyperCD::Rewind (void)
{
    DWORD RetCode;

    // If the video is playing you must stop it first.
    if (mPlaying)
        if (!Stop ())
            return FALSE;

    // Use the MCI_SEEK command to return to the beginning of the file.
    if (RetCode = mciSendCommand (mDeviceID, MCI_SEEK, MCI_SEEK_TO_START, (DWORD) (LPVOID) NULL)){
        mMCIErrCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        mOpen = FALSE;
        return FALSE;
    }

    return TRUE;
}

/*
    Forward the video to the end and display the last frame.
*/

```

```

BOOL CHyperCD::Forward (void)
{
    DWORD RetCode;

    // If the video is playing you must stop it first.
    if (mPlaying)
        if (!Stop ())
            return FALSE;

    // Use the MCI_SEEK command to go to the end of the file.
    if (RetCode = mciSendCommand (mDeviceID, MCI_SEEK, MCI_SEEK_TO_END, (DWORD) (LPVOID) NULL)) {
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        mOpen = FALSE;
        return FALSE;
    }

    return TRUE;
}

/*
Forward the video by one frame.
*/
BOOL CHyperCD::FrameForward (void)
{
    DWORD RetCode;
    MCI_ANIM_STEP_PARMS StepParms;
    MCI_STATUS_PARMS StatusParms;
    DWORD Length, Position;

    // If the video is playing you must stop it first.
    if (mPlaying)
        if (!Stop ())
            return FALSE;

    // Determine the length in frames of the file.
    StatusParms.dwItem = MCI_STATUS_LENGTH;
    if (RetCode = mciSendCommand (mDeviceID, MCI_STATUS, MCI_STATUS_ITEM, (DWORD) (LPVOID) &StatusParms)) {
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        return FALSE;
    }
    Length = StatusParms.dwReturn;

    // Determine the current position of the file.
    StatusParms.dwItem = MCI_STATUS_POSITION;
    if (RetCode = mciSendCommand (mDeviceID, MCI_STATUS, MCI_STATUS_ITEM, (DWORD) (LPVOID) &StatusParms)) {
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        return FALSE;
    }
    Position = StatusParms.dwReturn;

    // If we're already at the end return.
    if (Length == Position)
        return TRUE;

    // If not already at the end use MCI_STEP to move forward one frame.
    StepParms.dwFrames = 1L;
    if (RetCode = mciSendCommand (mDeviceID, MCI_STEP, MCI_ANIM_STEP_FRAMES, (DWORD) (LPVOID) &StepParms))
    {
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        mOpen = FALSE;
        return FALSE;
    }

    return TRUE;
}

```

Step back the video by one frame.

```
BOOL CHyperCD::FrameBack (void)
{
    DWORD RetCode;
    MCI_ANIM_STEP_PARMS StepParms;

    // If the video is playing you must stop it first.
    if (mPlaying)
        if (!Stop ())
            return FALSE;

    // Use MCI_STEP to move back one frame.
    StepParms.dwFrames = 1L;
    if (RetCode = mciSendCommand (mDeviceID, MCI_STEP, MCI_ANIM_STEP_REVERSE, (DWORD) (LPVOID) &StepParms)
    ) {
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        mOpen = FALSE;
        return FALSE;
    }

    return TRUE;
}

DWORD CHyperCD::GetLength (void)
{
    DWORD RetCode;
    // Make sure a device is open.
    if (!mDeviceID)
        return 0;

    MCI_STATUS_PARMS StatusParms;

    // Determine the length in frames of the file.
    StatusParms.dwItem = MCI_STATUS_LENGTH;
    if (RetCode = mciSendCommand (mDeviceID, MCI_STATUS, MCI_STATUS_ITEM, (DWORD) (LPVOID) &StatusParms)){
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        return FALSE;
    }
    return (int) StatusParms.dwReturn;
}

DWORD CHyperCD::GetPosition (void)
{
    DWORD RetCode;
    // Make sure a device is open.
    if (!mDeviceID)
        return 0;

    MCI_STATUS_PARMS StatusParms;

    // Determine the current position of the file.
    StatusParms.dwItem = MCI_STATUS_POSITION;
    if (RetCode = mciSendCommand (mDeviceID, MCI_STATUS, MCI_STATUS_ITEM, (DWORD) (LPVOID) &StatusParms)){
        mMCIErrorCode = RetCode;
        mciSendCommand (mDeviceID, MCI_CLOSE, 0L, NULL);
        return FALSE;
    }
    return (int) StatusParms.dwReturn;
}

int CHyperCD::GetWidth (void)
{
    // Make sure a device is open.
    if (!mDeviceID)
        return 0;

    MCI_ANIM_RECT_PARMS RectParms;
```

```

// Use MCI_WHERE to get the video window rectangle.
mciSendCommand (mDeviceID, MCI_WHERE, (DWORD) MCI_ANIM_WHERE_SOURCE, (DWORD) (LPVOID) &RectParms);

return (int) RectParms.rc.right;
}

int CHyperCD::GetHeight (void)
{
    // Make sure a device is open.
    if (!mDeviceID)
        return 0;

    MCI_ANIM_RECT_PARMS RectParms;

    // Use MCI_WHERE to get the video window rectangle.
    mciSendCommand (mDeviceID, MCI_WHERE, (DWORD) MCI_ANIM_WHERE_SOURCE, (DWORD) (LPVOID) &RectParms);

    return (int) RectParms.rc.bottom;
}

CString CHyperCD::GetErrorString (void)
{
    static const char *Strings[] = {
        "Could not set the position for the video in the window.",
    };
    char ErrorBuffer[MAXERRORLENGTH];

    // An error was generated from within the CHyperCD class.
    if (mErrorCode == 1)
        return (CString) Strings[0];
    // An error was generated from a MCI function call.
    else if (mciGetErrorString (mMCIErrorCode, (LPSTR) ErrorBuffer, MAXERRORLENGTH))
        return (CString) ErrorBuffer;
    // There is no error.
    else
        return (CString) ("There is no error or the error is undefined.");
}

/*
-----*
A private function that simply positions the video window in the
center of the parent window.
-----*/
BOOL CHyperCD::Center (void)
{
    DWORD RetCode;
    CRect BoundsRect, MovieRect, WindowRect;
    MCI_ANIM_RECT_PARMS RectParms;

    // Use MCI_WHERE to get the video window rectangle.
    if (RetCode = mciSendCommand (mDeviceID, MCI_WHERE, (DWORD) MCI_ANIM_WHERE_SOURCE, (DWORD) (LPVOID) &RectParms))
        return FALSE;

    // Determine the parameters for the playback window.
    BoundsRect = RectParms.rc;
    MovieRect.left = 0;
    MovieRect.top = 0;
    MovieRect.right = MovieRect.left + BoundsRect.right;
    MovieRect.bottom = MovieRect.top + BoundsRect.bottom;

    ::GetWindowRect (mMovieWnd, &WindowRect);

    // Move the playback window.
    MoveWindow (mMovieWnd, (WindowRect.Width() - MovieRect.Width()) / 2,
                (WindowRect.Height() - MovieRect.Height()) / 2,
                BoundsRect.right, BoundsRect.bottom, TRUE);

    return TRUE;
}

```

File: NpWIN.cpp

```
/*
----- */

#include "windows.h"
#include "npapi.h"
#include "npupp.h"

#define DEBUG_PROC 0
#ifdef WIN32
#define NP_EXPORT
#else
#define NP_EXPORT __export
#endif

static NPNetScapeFuncs* g_pNavigatorFuncs = NULL;

// PLUGIN DLL entry points
// These are the Windows specific DLL entry points,
// not the "normal" plugin entry points.
// The "normal" ones are in NPSHELL.CPP

// fills in the func table used by Navigator
// to call entry points in plugin DLL.
// Note that these entry points ensure that DS
// is loaded by using the NP_LOADDS macro,
// when compiling for Win16

NPError WINAPI NP_EXPORT NP_GetEntryPoints(NPPluginFuncs* pFuncs)
{
    // trap a NULL ptr
    if(pFuncs == NULL)
        return NPERR_INVALID_FUNCTABLE_ERROR;

    // if the plugin's function table is smaller than the plugin expects,
    // then they are incompatible, and should return an error
    if(pFuncs->size < sizeof(NPPluginFuncs))
        return NPERR_INVALID_FUNCTABLE_ERROR;

    pFuncs->version      = (NP_VERSION_MAJOR << 8) | NP_VERSION_MINOR;
    pFuncs->newp          = NPP_New;
    pFuncs->destroy      = NPP_Destroy;
    pFuncs->setwindow    = NPP_SetWindow;
    pFuncs->newstream     = NPP_NewStream;
    pFuncs->destroysream = NPP_DestroyStream;
    pFuncs->asfile        = NPP_StreamAsFile;
    pFuncs->writeready   = NPP_WriteReady;
    pFuncs->write         = NPP_Write;
    pFuncs->print         = NPP_Print;
    pFuncs->event         = NULL;           // reserved

    return NPERR_NO_ERROR;
}

// called immediately after the plugin DLL is loaded
NPError WINAPI NP_EXPORT NP_Initialize(NPNetScapeFuncs* pFuncs)
{
    // trap a NULL ptr
    if(pFuncs == NULL)
        return NPERR_INVALID_FUNCTABLE_ERROR;

    // save it for future reference
    g_pNavigatorFuncs = pFuncs;
```

```

// if the plugin's major version is lower than the Navigator's,
// then they are incompatible, and should return an error
if(HIBYTE(pFuncs->version) > NP_VERSION_MAJOR)
    return NPERR_INCOMPATIBLE_VERSION_ERROR;

// if the Navigator's function table is smaller than the plugin expects,
// then they are incompatible, and should return an error
if(pFuncs->size < sizeof(NPNetscapeFuncs))
    return NPERR_INVALID_FUNCTABLE_ERROR;

if(DEBUG_PROC)MessageBox(NULL,"WINAPI NP_EXPORT NP_Initialize","DEBUG_PROC",MB_OK);
return NPP_Initialize();
}

// called immediately before the plugin DLL is unloaded
NPError WINAPI NP_EXPORT NP_Shutdown()
{
    if(DEBUG_PROC)MessageBox(NULL,"WINAPI NP_EXPORT NP_Shutdown","DEBUG_PROC",MB_OK);

    NPP_Shutdown();

    g_pNavigatorFuncs = NULL;

    return NPERR_NO_ERROR;
}

// NAVIGATOR Entry points
// These entry points expect to be called from within the plugin. The
// noteworthy assumption is that DS has already been set to point to the
// plugin's DLL data segment. Don't call these functions from outside
// the plugin without ensuring DS is set to the DLLs data segment first,
// typically using the NP_LOADDS macro
// returns the major/minor version numbers of the Plugin API for the plugin
// and the Navigator
void NPN_Version(int* plugin_major, int* plugin_minor, int* netscape_major, int* netscape_minor)
{
    *plugin_major = NP_VERSION_MAJOR;
    *plugin_minor = NP_VERSION_MINOR;
    *netscape_major = HIBYTE(g_pNavigatorFuncs->version);
    *netscape_minor = LOBYTE(g_pNavigatorFuncs->version);
}

// causes the specified URL to be fetched and streamed in
NPError NPN_GetURL(NPP instance, const char *url, const char *window)
{
    return g_pNavigatorFuncs->geturl(instance, url, window);
}

NPError NPN_PostURL(NPP instance, const char* url, const char* window, uint32 len, const char* buf, NPBool file)
{
    return g_pNavigatorFuncs->posturl(instance, url, window, len, buf, file);
}

// Requests that a number of bytes be provided on a stream. Typically
// this would be used if a stream was in "pull" mode. An optional
// position can be provided for streams which are seekable.
NPError NPN_RequestRead(NPStream* stream, NPByteRange* rangeList)
{
    return g_pNavigatorFuncs->requestread(stream, rangeList);
}

// Creates a new stream of data from the plug-in to be interpreted
// by Netscape in the current window.
NPError NPN_NewStream(NPP instance, NPMIMEType type, NPStream *stream)
{

```

```

        return g_pNavigatorFuncs->news(&g_NPP, instance, type, stream);
    }

    // Provides len bytes of data.
    int32 NPN_Write(NPP instance, NPStream *stream,
                    int32 len, void *buffer)
    {
        return g_pNavigatorFuncs->write(instance, stream, len, buffer);
    }

    // Closes a stream object.
    // reason indicates why the stream was closed.
    NPError NPN_DestroyStream(NPP instance, NPStream* stream, NPError reason)
    {
        return g_pNavigatorFuncs->destroyStream(instance, stream, reason);
    }

    // Provides a text status message in the Netscape client user interface
    void NPN_Status(NPP instance, const char *message)
    {
        g_pNavigatorFuncs->status(instance, message);
    }

    // returns the user agent string of Navigator, which contains version info
    const char* NPN_UserAgent(NPP instance)
    {
        return g_pNavigatorFuncs->uagent(instance);
    }

    // allocates memory from the Navigator's memory space. Necessary so that
    // saved instance data may be freed by Navigator when exiting.
    void* NPN_MemAlloc(uint32 size)
    {
        return g_pNavigatorFuncs->memalloc(size);
    }

    // reciprocal of MemAlloc() above
    void NPN_MemFree(void* ptr)
    {
        g_pNavigatorFuncs->memfree(ptr);
    }

    // private function to Netscape. do not use!
    void NPN_ReloadPlugins(NPBool reloadPages)
    {
        g_pNavigatorFuncs->reloadplugins(reloadPages);
    }
}

```

The following is the software code listing for the requesting end-user's computer for the embodiment of Fig. 12.

```
/*
-----  
-----  
  
File:  
NpHcd.cpp  
  
Functions: Just the  
MFC shell....  
  
/*-----  
-----*/  
  
#include "stdafx.h"  
#include "nphcd.h"  
  
#ifdef _DEBUG  
#undef THIS_FILE  
static char BASED_CODE THIS_FILE[] = __FILE__;  
#endif  
  
//////////  
//  
// CJunkApp  
  
BEGIN_MESSAGE_MAP(CHcdPluginApp, CWinApp)  
    //{{AFX_MSG_MAP(CJunkApp) // NOTE  
    - the ClassWizard will add and remove mapping macros here.  
        // DO  
    NOT EDIT what you see in these blocks of generated code!  
    //}}AFX_MSG_MAP  
END_MESSAGE_MAP()  
  
//////////  
// CJunkApp construction  
  
CHcdPluginApp::CHcdPluginApp()  
{  
    // TODO: add construction code here,  
    // Place all significant  
    initialization in InitInstance  
}  
//////////  
// The one and only CHcdPluginApp object  
  
CHcdPluginApp theApp;  
/*-----  
//
```

```

//                                         HyperKey
// 
// The architecture of HyperKey allows for
// authorized and secure rendering of encrypted multimedia object
// from the protected web site. The encrypted HyperKey media
object is protected
// by crippling the media. Only authorized user can obtain
// trigger/keys from the server to unlock the HyperKey media.
// -----
-- --*/



#ifndef _WIN32
#define _WIN32
#endif

#ifndef _NPAPI_H
#include "npapi.h"
#include "plgwnd.h"
#include "CHyperCD.h"
#endif

// mmio
#include <mmsystem.h>
#include <qtw.h>

#include <time.h>
#include <string.h>
#include <io.h>
#include <fcntl.h>
#include <sys/stat.h>

//-----
// NPP_Initialize:
//-----

NPError NPP_Initialize(void)
{
    DEBUG_TEST("NPP_Initialize")
    return NPERR_NO_ERROR;
}

//-----
// NPP_Shutdown:

```

```

//-----
void NPP_Shutdown(void)
{
    DEBUG_TEST("NPP_Shutdown")
    return;
}
//-----
// NPP_New:
//-----
//-----

NPError NP_LOADDS
NPP_New(NPMIMEType pluginType,
        NPP instance,
        uint16 mode,
        int16 argc,
        char* argn[],
        char* argv[],
        NPSavedData* saved)
{
    DEBUG_TEST("NPP_New")

    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;

    instance->pdata = NPN_MemAlloc(sizeof(PluginInstance));
    PluginInstance* This = (PluginInstance*) instance->pdata;
    if (This != NULL)
    {
        This->window = NULL;
        This->cHypercd = new CHyperCD();

        This->mode = mode;
        This->bAutoStart = FALSE;
        This->bLoop = FALSE;
        strcpy( This->InformationField, "HyperCD" );
        int idx;
        STRING sSYSFILE;
        strcpy(sSYSFILE, SYSFILE);
        *p1, *p2;
        STRING szArg, szValue, cd_title;
        for (
idx = 0; idx < argc; idx++)
{

```

```

        strcpy(szArg,
        argn[idx]) ;

        strcpy(szValue, argv[idx]) ;

        // Check web tags and set HyperKey flags

        SetHyperKeyFlags(szArg, szValue) ;

        if (bDemandHyperKey)
            goto parsing_embed_tags;

        for (
idx =0; idx<argc; idx++) {

        strcpy(szArg,
        argn[idx]) ;

        strcpy(szValue, argv[idx]) ;

        ParseHyperKeyTags1(szArg,szValue) ;

    }

        if (!bDemandHyperKey)
            SysIO(sSYSFILE) ;

        for (idx =0; idx<argc; idx++)
        {
        strcpy(szArg,
        argn[idx]) ;

        strcpy(szValue, argv[idx]) ;

        ParseHyperKeyTags2(szArg,szValue) ;

    }

parsing_embed_tags:

        instance->pdata = This;
        return
NPERR_NO_ERROR;
    }
else
    return NPERR_OUT_OF_MEMORY_ERROR;
}

```

```

static void UnSubclass(PluginInstance *This)
{
    WNDPROC      OldWndProc;
    WNDPROC*     lplpfn = This->window->GetSuperWndProcAddr();
                DEBUG_TEST("UnSubclass")

    if ( !*lplpfn )
    {
        ASSERT(0);
        return;
    }

    // Set the original window procedure
    OldWndProc = (WNDPROC)::SetWindowLong( This->window->m_hWnd,
                                           
                                            GWL_WNDPROC, (LONG) *lplpfn );

    // A subclassed window's procedure is always AfxWndProc.
    // If this is not TRUE, then it's not a subclassed window.
    if ( OldWndProc != AfxWndProc )
        ASSERT(0);
}

static void KillHyperCDWindow(PluginInstance *This)
{
    DEBUG_TEST("KillHyperCDWindow")

    if (This->cHypercd) {
        This->cHypercd->Close();
        delete This->cHypercd;
        This->cHypercd = NULL;
    }

    CleanUpHyperKey();

    UnSubclass(This);

    if (This->window) {
        This->window->Detach();
        delete This->window;
        This->window = NULL;
    }
}

//-----

```

```

// NPP_Destroy:
//-----
-----NPError NP_LOADDS
NPP_Destroy(NPP instance, NPSavedData** save)
{
    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;

    PluginInstance* This = (PluginInstance*) instance->pdata;

    //
    // Note: If desired, call NP_MemAlloc to create a
    // NPSavedData structure containing any state information
    // that you want restored if this plugin instance is later
    // recreated.
    //

    if (This != NULL)
    {
        KillHyperCDWindow(This);
        NPN_MemFree(instance->pdata);
    }

    return NPERR_NO_ERROR;
}

//-----
-----// NPP_SetWindow:
//-----
-----NPError NP_LOADDS
NPP_SetWindow(NPP instance, NPWindow* np_window)
{
    DEBUG_TEST("NPP_SetWindow")

    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;

    PluginInstance* This = (PluginInstance*) instance->pdata;

    //
    // Note: Before setting fWindow to point to the
    // new window, you may wish to compare the new window
    // info to the previous window (if any) to note window
    // size changes, etc.

```

```

//



if (!np_window)
    return NPERR_GENERIC_ERROR;

if (!instance)
    return NPERR_INVALID_INSTANCE_ERROR;

if (!This)
    return NPERR_GENERIC_ERROR;

if (!np_window->window && !This->window) // spurious entry
    return NPERR_NO_ERROR;

if (!np_window->window && This->window)
{
    // window went away
    KillHyperCDWindow(This);
    return NPERR_NO_ERROR;
}
if (!This->window && np_window->window)
{
    // First time in -- no window created by plugin yet
    This->window = (CPluginWindow *) new CPluginWindow();
    if (!This->window->SubclassWindow((HWND) np_window->window))
    {
        MessageBox(NULL, "SubclassWindow
Failed", "HyperCD", MB_OK);
        return NPERR_GENERIC_ERROR;
    }
    // Save This pointer in window class member variable..this
lets the
    // window message handling have access to the data pointer
easily
    This->window->StoreData(This);
}

// resize or moved window (or newly created)
This->window->InvalidateRect(NULL);
This->window->UpdateWindow();
return NPERR_NO_ERROR;
}


```

---

```

-----  

// NPP_NewStream:  

-----  

-----  

NPError NP_LOADDS  

NPP_NewStream(NPP instance,
                NPMIMEType type,  

                NPStream *stream,  

                NPBool seekable,  

                uint16 *stype)
```

```

{
    DEBUG_TEST("NPP_NewStream")

    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;
    PluginInstance* This = (PluginInstance*) instance->pdata;

    *stype = NP_ASFILE;

    return NPERR_NO_ERROR;
}

int32 STREAMBUFSIZE = 0X0FFFFFFF; // If we are reading from a file
in NPAsFile // mode so we can take any size
stream in our // write call (since we ignore
it)

//-----
// NPP_WriteReady:
//-----

int32 NP_LOADDS
NPP_WriteReady(NPP instance, NPStream *stream)
{
    DEBUG_TEST("NPP_WriteReady")

    if (instance != NULL)
    {
        PluginInstance* This = (PluginInstance*) instance->pdata;
    }
    return STREAMBUFSIZE; // Number of bytes ready to accept in
NPP_Write()
}

//-----
// NPP_Write:
//-----

int32 NP_LOADDS
NPP_Write(NPP instance, NPStream *stream, int32 offset, int32 len,
void *buffer)
{

```

```

        DEBUG_TEST("NPP_Write")

    if (instance != NULL)
    {
        PluginInstance* This = (PluginInstance*) instance->pdata;
    }

    return len;           // The number of bytes accepted
}
//-----
// NPP_DestroyStream:
//-----
NPError NP_LOADDS
NPP_DestroyStream(NPP instance, NPStream *stream, NPError reason)
{
    DEBUG_TEST("NPP_DestroyStream")

    if (instance == NULL)
        return NPERR_INVALID_INSTANCE_ERROR;
    PluginInstance* This = (PluginInstance*) instance->pdata;

    return NPERR_NO_ERROR;
}

//-----
// NPP_StreamAsFile:
//-----
void NP_LOADDS
NPP_StreamAsFile(NPP instance, NPStream *stream, const char*
szStream)
{
    int
    nTriggerIndex, nType;
    char
    szFile[MAX_STR], szMessage[MAX_STR];
    char
    szMsg[200];
    char
        *pTemp,
    szPath[MAX_STR];

    DEBUG_TEST("NPP_StreamAsFile")
    if (instance == NULL)

```

```

                                return;
PluginInstance* This = (PluginInstance*) instance->pdata;
if (!This->cHypercd)
                                return;

// Obtain object/keys
                                ObtainKey(Object, szStream);
if(bDemandHyperKey)
{
    if(ObjectType(Object) == PGI_HYPERKEY)
// file in bDemandHyperKey

1. check we have permission

Permission =
PermissionFromWebtoUseHyperKey();
// if our right is lower than the permitted, return

if(Permission.right > User.right)
return;
// 2. if we have permission, get the access path

strcpy(szPath, GetAccessPath(Permission));
// 3. retrieve the object      and wait

RetrieveHyperKeyObject(szPath);
return;
}

// B.
check if the streamed file is PGI_MEDIA
else if(
ObjectType(Object) == PGI_MEDIA) // jpeg, avi, encrypted media type
{
    DisplayObject(Object );
}
else //
anything else under bDemandHyperKey, is not valid

return;
}

```

```

                                else// for this version, return and
not process other command
                                return;

}

//-----
// NPP_Print:
//-----
void NP_LOADDS
NPP_Print(NPP instance, NPPrint* printInfo)
{
    DEBUG_TEST("NPP_Print")

    if(printInfo == NULL) // trap invalid parm
        return;

    if (instance != NULL)
    {
        PluginInstance* This = (PluginInstance*) instance->pdata;

        if (printInfo->mode == NP_FULL)
        {
            //
            // Note: If your plugin would like to take over
            // printing completely when it is in full-screen mode,
            // set printInfo->pluginPrinted to TRUE and print your
            // plugin as you see fit.  If your plugin wants Netscape
            // to handle printing in this case, set printInfo-
>pluginPrinted
            // to FALSE (the default) and do nothing.  If you do
want
            // to handle printing yourself, printOne is true if the
            // print button (as opposed to the print menu) was
clicked.
            // On the Macintosh, platformPrint is a THPrint; on
Windows,
            // platformPrint is a structure (defined in npapi.h)
containing
            // the printer name, port, etc.
            //
            void* platformPrint = printInfo-
>print.fullPrint.platformPrint;
            NPBool printOne = printInfo->print.fullPrint.printOne;

            printInfo->print.fullPrint.pluginPrinted = FALSE; // Do
the default
        }
        else // If not fullscreen, we must be embedded
    }
}

```

```

        {
            //
            // Note: If your plugin is embedded, or is full-screen
            // but you returned false in pluginPrinted above,
NPP_Print
                //
                // will be called with mode == NP_EMBED. The NPWindow
                // in the printInfo gives the location and dimensions of
                // the embedded plugin on the printed page. On the
Macintosh,
                //
                // platformPrint is the printer port; on Windows,
platformPrint
                //
                // is the handle to the printing device context.
                //
                NPWindow* printWindow = &(printInfo-
>print.embedPrint.window);
                void* platformPrint = printInfo-
>print.embedPrint.platformPrint;

            }
        }
    }

//-----
// NPP_HandleEvent:
// Mac-only.
//-----

int16 NPP_HandleEvent(NPP instance, void* event)
{
    NPBool eventHandled = FALSE;
    if (instance == NULL)
        return eventHandled;

    PluginInstance* This = (PluginInstance*) instance->pdata;

    //
    // Note: The "event" passed in is a Macintosh
    // EventRecord*. The event.what field can be any of the
    // normal Mac event types, or one of the following additional
    // types defined in npapi.h: getFocusEvent, loseFocusEvent,
    // adjustCursorEvent. The focus events inform your plugin
    // that it will become, or is no longer, the recipient of
    // key events. If your plugin doesn't want to receive key
    // events, return false when passed at getFocusEvent. The
    // adjustCursorEvent is passed repeatedly when the mouse is
    // over your plugin; if your plugin doesn't want to set the
    // cursor, return false. Handle the standard Mac events as
    // normal. The return value for all standard events is
currently
    // ignored except for the key event: for key events, only return
    // true if your plugin has handled that particular key event.
    //
}

```

```

        return eventHandled;
    }

// stdafx.cpp : source file that includes just the standard includes
//                     HyperCD.pch will be the pre-compiled
header
//                     stdafx.obj will contain the pre-
compiled type information

#include "stdafx.h"

/*
 *  npapi.h $Revision: 1.57 $
 *  Netscape client plug-in API spec
 */

#ifndef _NPAPI_H_
#define _NPAPI_H_

/* XXX this needs to get out of here */
#if defined(__MWERKS__)
#ifndef XP_MAC
#define XP_MAC
#endif
#endif

/*
 *  Version constants
 */

#define NP_VERSION_MAJOR 0
#define NP_VERSION_MINOR 6

/*
 *  Basic types
 */

#ifndef _UINT16
typedef unsigned short uint16;
#endif
#ifndef _UINT32
typedef unsigned long uint32;
#endif
#ifndef _INT16
typedef short int16;
#endif
#ifndef _INT32
typedef long int32;

```

```

#endif

#ifndef FALSE
#define FALSE (0)
#endif
#ifndef TRUE
#define TRUE (1)
#endif
#ifndef NULL
#define NULL (0L)
#endif

typedef unsigned char      NPBool;
typedef void*               NPEvent;
typedef int16                NPError;
typedef char*               NPMIMEType;

/*
 * NPP is a plug-in's opaque instance handle
 */
typedef struct _NPP
{
    void*      pdata;           /* plug-in private data */
    void*      ndata;           /* netscape private data */
} NPP_t;

typedef NPP_t*   NPP;

typedef struct _NPStream
{
    void*      pdata;           /* plug-in private data */
    void*      ndata;           /* netscape private data */
    const char* url;
    uint32     end;
    uint32     lastmodified;
} NPStream;

typedef struct _NPByteRange
{
    int32      offset;          /* negative
offset means from the end */
    uint32     length;
    struct _NPByteRange*       next;
} NPByteRange;

typedef struct _NPSavedData
{
    int32     len;
    void*     buf;
} NPSavedData;

```

```

typedef struct _NPRect
{
    uint16 top;
    uint16 left;
    uint16 bottom;
    uint16 right;
} NPRect;

typedef struct _NPWindow
{
    void* window; /* platform specific window
handle */
    uint32 x; /* position of top left corner
relative to a netscape page */
    uint32 y; /* maximum window size */
    uint32 width; /* clipping rectangle in port
    uint32 height;
    NPRect clipRect;
coordinates */
} NPWindow;

typedef struct _NPFullPrint
{
    NPBool pluginPrinted; /* Set TRUE if plugin handled
fullscreen printing */
    NPBool printOne; /* TRUE if plugin should print
one copy to default printer */
    void* platformPrint; /* Platform-specific printing
info */
} NPFullPrint;

typedef struct _NPEmbedPrint
{
    NPWindow window; /* Platform-specific printing
void* platformPrint;
info */
} NPEmbedPrint;

typedef struct _NPPrint
{
    uint16 mode; /* NP_FULL or NP_EMBED */
    union
    {
        NPFullPrint fullPrint; /* if mode is NP_FULL */
        NPEmbedPrint embedPrint; /* if mode is NP_EMBED */
    } print;
} NPPrint;

```

```

#ifndef XP_MAC

/*
 * Mac-specific structures and definitions.
 */

#include <Quickdraw.h>
#include <Events.h>

typedef struct NP_Port
{
    CGrafPtr      port;           /* Grafport */
    int32         portx;          /* position inside the topmost
window */
    int32         porty;
} NP_Port;

/*
 * Non-standard event types that can be passed to HandleEvent
 */
#define getFocusEvent        (osEvt + 16)
#define loseFocusEvent       (osEvt + 17)
#define adjustCursorEvent    (osEvt + 18)

#endif /* XP_MAC */

#define NP_EMBED            1
#define NP_FULL             2
#define NP_BACKGROUND        3

#define NP_NORMAL            1
#define NP_SEEK              2
#define NP_ASFILE            3

#define NP_MAXREADY ((unsigned)(~0)<<1)>>1

/*
 * Error and reason code definitions.
 */

#define NP_NOERR 0
#define NP_EINVAL 1
#define NP_EABORT 2

#define NPERR_BASE 0
#define NPERR_NO_ERROR (NPERR_BASE + 0)
#define NPERR_GENERIC_ERROR (NPERR_BASE + 1)
#define NPERR_INVALID_INSTANCE_ERROR (NPERR_BASE + 2)

```

```

#define NPERR_INVALID_FUNCTABLE_ERROR      (NPERR_BASE + 3)
#define NPERR_MODULE_LOAD_FAILED_ERROR    (NPERR_BASE + 4)
#define NPERR_OUT_OF_MEMORY_ERROR        (NPERR_BASE + 5)
#define NPERR_INVALID_PLUGIN_ERROR       (NPERR_BASE + 6)
#define NPERR_INVALID_PLUGIN_DIR_ERROR   (NPERR_BASE + 7)
#define NPERR_INCOMPATIBLE_VERSION_ERROR (NPERR_BASE + 8)

#define NPRES_BASE                      0
#define NPRES_NETWORK_ERR               (NPRES_BASE + 0)
#define NPRES_USER_BREAK                (NPRES_BASE + 1)
#define NPRES_DONE                       (NPRES_BASE + 3)

/*
 * Function prototypes.
 * Functions beginning with 'NPP' are functions provided by the
plugin that Netscape will call.
 * Functions beginning with 'NPN' are functions provided by
Netscape that the plugin will call.
 */

#if defined(_WINDOWS) && !defined(WIN32)
#define NP_LOADDDS _loaddds
#else
#define NP_LOADDDS
#endif

#ifndef __cplusplus
extern "C" {
#endif

NPError           NPP_Initialize(void);
void              NPP_Shutdown(void);
NPError          NP_LOADDDS NPP_New(NPMIMEType pluginType, NPP instance,
uint16 mode, int16 argc, char* argv[], char* argcn[], NPSavedData*
saved);
NPError          NP_LOADDDS NPP_Destroy(NPP instance, NPSavedData** save);
NPError          NP_LOADDDS NPP_SetWindow(NPP instance, NPWindow* window);
NPError          NP_LOADDDS NPP_NewStream(NPP instance, NPMIMEType type,
NPStream* stream, NPBool seekable, uint16* stype);
NPError          NP_LOADDDS NPP_DestroyStream(NPP instance, NPStream*
stream, NPError reason);
int32            NP_LOADDDS NPP_WriteReady(NPP instance, NPStream*
stream);
int32            NP_LOADDDS NPP_Write(NPP instance, NPStream* stream,
int32 offset, int32 len, void* buffer);
void             NP_LOADDDS NPP_StreamAsFile(NPP instance, NPStream*
stream, const char* fname);
void             NP_LOADDDS NPP_Print(NPP instance, NPPrint*
platformPrint);
int16            NPP_HandleEvent(NPP instance, void* event);

```

```

void      NPN_Version(int* plugin_major, int* plugin_minor, int*
netscape_major, int* netscape_minor);
NPError   NPN_GetURL(NPP instance, const char* url, const char*
window);
NPError   NPN_PostURL(NPP instance, const char* url, const char*
window, uint32 len, const char* buf, NPBool file);
NPError   NPN_RequestRead(NPStream* stream, NPByteRange*
rangeList);
NPError   NPN_NewStream(NPP instance, NPMIMEType type, NPStream*
stream);
int32    NPN_Write(NPP instance, NPStream* stream, int32 len,
void* buffer);
NPError   NPN_DestroyStream(NPP instance, NPStream* stream,
NPError reason);
void     NPN_Status(NPP instance, const char* message);
const char* NPN_UserAgent(NPP instance);
void*    NPN_MemAlloc(uint32 size);
void     NPN_MemFree(void* ptr);
uint32   NPN_MemFlush(uint32 size);
void
NPN_ReloadPlugins(NPBool reloadPages);

#ifndef __cplusplus
} /* end extern "C" */
#endif

#endif /* _NPAPI_H_ */

/*
 * npupp.h $Revision: 1.24 $
 * function call mechanics needed by platform specific glue code.
 */

#ifndef _NPUPP_H_
#define _NPUPP_H_

#ifndef GENERATINGCFM
#define GENERATINGCFM 0
#endif

#ifndef _NPAPI_H_
#include "npapi.h"
#endif

*****  

* *****  

    plug-in function table macros
                                for each function in and out
of the plugin API we define
                                typedef NPP_FooUPP

```

```

#define
NewNPP_FooProc

#define
CallNPP_FooProc
for
mac, define the UPP magic for PPC/68K calling
*****
*/ ****

/* NPP_Initialize */

#if GENERATINGCFM
typedef UniversalProcPtr NPP_InitializeUPP;

enum {
                                uppNPP_InitializeProcInfo =
kThinkCStackBased
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(0))
RESULT_SIZE(SIZE_CODE(0))
};

#define NewNPP_InitializeProc FUNC \
                                (NPP_InitializeUPP)
NewRoutineDescriptor((ProcPtr)FUNC, uppNPP_InitializeProcInfo,
GetCurrentArchitecture())
#define CallNPP_InitializeProc FUNC \
                                (void)CallUniversalProc ((UniversalProc
Ptr)FUNC, uppNPP_InitializeProcInfo)

#else

typedef void (*NPP_InitializeUPP) (void);
#define NewNPP_InitializeProc FUNC \
                                ((NPP_InitializeUPP) (FUNC))
#define CallNPP_InitializeProc FUNC \
                                (* (FUNC)) ()

#endif

/* NPP_Shutdown */

#if GENERATINGCFM
typedef UniversalProcPtr NPP_ShutdownUPP;

```

```

enum {
    uppNPP_ShutdownProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(0))
    |
    RESULT_SIZE(SIZE_CODE(0))
};

#define NewNPP_ShutdownProc(FUNC) \
    (NPP_ShutdownUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_ShutdownProcInfo, \
GetCurrentArchitecture())
#define CallNPP_ShutdownProc(FUNC) \
    (void)CallUniversalProc((UniversalProc \
Ptr)(FUNC), uppNPP_ShutdownProcInfo)
\
#else
typedef void (*NPP_ShutdownUPP)(void);
#define NewNPP_ShutdownProc(FUNC) \
    ((NPP_ShutdownUPP) (FUNC))
#define CallNPP_ShutdownProc(FUNC) \
    (* (FUNC)) ()
\
#endif

/* NPP_New */

#if GENERATINGCFM
typedef UniversalProcPtr NPP_NewUPP;
enum {
    uppNPP_NewProcInfo = kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPMIMEType)))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPP)))
    STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(uint16)))
    STACK_ROUTINE_PARAMETER(4, SIZE_CODE(sizeof(int16)))
    STACK_ROUTINE_PARAMETER(5, SIZE_CODE(sizeof(char **)))
    STACK_ROUTINE_PARAMETER(6, SIZE_CODE(sizeof(char **)))
    STACK_ROUTINE_PARAMETER(7, SIZE_CODE(sizeof(NPSavedData *)))
}

```

```

RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPP_NewProc(FUNC) \
    (NPP_NewUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_NewProcInfo, \
GetCurrentArchitecture())
#define CallNPP_NewProc(FUNC, ARG1, ARG2, ARG3, ARG4, ARG5, ARG6, \
ARG7) \
    (NPError)CallUniversalProc((UniversalP \
rocPtr)(FUNC), uppNPP_NewProcInfo, \
(ARG1), (ARG2), (ARG3), (ARG4), (ARG5), (ARG6), (ARG7))
#else

typedef NPError (*NPP_NewUPP)(NPMIMEType pluginType, \
NPP instance, uint16 mode, int16 argc, char* argv[], char* argv[], \
NPSavedData* saved);
#define NewNPP_NewProc(FUNC) \
    ((NPP_NewUPP)(FUNC)) \
#define CallNPP_NewProc(FUNC, ARG1, ARG2, ARG3, ARG4, ARG5, ARG6, \
ARG7) \
    (*(FUNC))(ARG1), (ARG2), (ARG3), \
(ARG4), (ARG5), (ARG6), (ARG7))

#endif

/* NPP_Destroy */

#if GENERATINGCFM

typedef UniversalProcPtr NPP_DestroyUPP;
enum {
    uppNPP_DestroyProcInfo = \
kThinkCStackBased \
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP))) \
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPSavedData **))) \
RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};
#define NewNPP_DestroyProc(FUNC) \
    (NPP_DestroyUPP)

```

```

NewRoutineDescriptor( (ProcPtr) (FUNC) , uppNPP_DestroyProcInfo,
GetCurrentArchitecture())
#define CallNPP_DestroyProc(FUNC, ARG1, ARG2) \
                                \
(NPError) CallUniversalProc((UniversalP
rocPtr) (FUNC) , uppNPP_DestroyProcInfo, (ARG1), (ARG2))
#else

typedef NPError (*NPP_DestroyUPP) (NPP instance,
NPSavedData** save);
#define NewNPP_DestroyProc(FUNC) \
                                \
((NPP_DestroyUPP) (FUNC)) \
#define CallNPP_DestroyProc(FUNC, ARG1, ARG2) \
                                \
(* (FUNC)) ((ARG1), (ARG2))

#endif

/* NPP_SetWindow */

#if GENERATINGGCFM

typedef UniversalProcPtr NPP_SetWindowUPP;
enum {
    uppNPP_SetWindowProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPWindow *)))
    RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};
#define NewNPP_SetWindowProc(FUNC) \
                                \
(NPP_SetWindowUPP)
NewRoutineDescriptor( (ProcPtr) (FUNC) , uppNPP_SetWindowProcInfo,
GetCurrentArchitecture())
#define CallNPP_SetWindowProc(FUNC, ARG1, ARG2) \
                                \
(NPError) CallUniversalProc((UniversalP
rocPtr) (FUNC) , uppNPP_SetWindowProcInfo, (ARG1), (ARG2))
#else

typedef NPError (*NPP_SetWindowUPP) (NPP instance,
NPWindow* window);
#define NewNPP_SetWindowProc(FUNC) \
                                \
((NPP_SetWindowUPP) (FUNC)) \
#define CallNPP_SetWindowProc(FUNC, ARG1, ARG2) \
                                \

```

```

(* (FUNC)) ((ARG1), (ARG2))

#endif

/* NPP_NewStream */

#if GENERATINGCFM

typedef UniversalProcPtr NPP_NewStreamUPP;
enum {
    uppNPP_NewStreamProcInfo =
kThinkCStackBased
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPMIMEType)))
STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(NPStream *)))
STACK_ROUTINE_PARAMETER(4, SIZE_CODE(sizeof(NPBool)))
STACK_ROUTINE_PARAMETER(5, SIZE_CODE(sizeof(uint16 *)))
RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPP_NewStreamProc(FUNC)
    (NPP_NewStreamUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_NewStreamProcInfo,
GetCurrentArchitecture())
#define CallNPP_NewStreamProc(FUNC, ARG1, ARG2, ARG3, ARG4, ARG5)
    \
(NPError)CallUniversalProc((UniversalP
rocPtr)(FUNC), uppNPP_NewStreamProcInfo, (ARG1), (ARG2), (ARG3),
(ARG4), (ARG5))
#else

typedef NPError          (*NPP_NewStreamUPP)(NPP instance,
NPMIMEType type, NPStream* stream, NPBool seekable, uint16* stype);
#define NewNPP_NewStreamProc(FUNC)
    \
((NPP_NewStreamUPP) (FUNC))
#define CallNPP_NewStreamProc(FUNC, ARG1, ARG2, ARG3, ARG4, ARG5) \
    \
(* (FUNC)) ((ARG1), (ARG2), (ARG3),
(ARG4), (ARG5))
#endif

/* NPP_DestroyStream */

```

```

#if GENERATINGCFM

typedef UniversalProcPtr NPP_DestroyStreamUPP;
enum {
    uppNPP_DestroyStreamProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPStream *)))
    STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(NPError)))
    RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPP_DestroyStreamProc(FUNC) \
    (NPP_DestroyStreamUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_DestroyStreamProcInfo, \
GetCurrentArchitecture())
#define CallNPP_DestroyStreamProc(FUNC, NPParg, NPStreamPtr, \
NPErrorArg) \
    (NPError)CallUniversalProc((UniversalP \
rocPtr)(FUNC), uppNPP_DestroyStreamProcInfo, (NPParg), \
(NPStreamPtr), (NPErrorArg))

#else

typedef NPError (*NPP_DestroyStreamUPP)(NPP instance,
NPStream* stream, NPError reason);
#define NewNPP_DestroyStreamProc(FUNC) \
    ((NPP_DestroyStreamUPP) (FUNC)) \
#define CallNPP_DestroyStreamProc(FUNC, NPParg, NPStreamPtr, \
NPErrorArg) \
    (* (FUNC)) ((NPParg), (NPStreamPtr), \
(NPErrorArg))

#endif

/* NPP_WriteReady */

#if GENERATINGCFM

typedef UniversalProcPtr NPP_WriteReadyUPP;
enum {
    uppNPP_WriteReadyProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))

```

```

STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPStream *)))
|
RESULT_SIZE(SIZE_CODE(sizeof(int32)))
};

#define NewNPP_WriteReadyProc(FUNC)
|
(NPP_WriteReadyUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_WriteReadyProcInfo,
GetCurrentArchitecture())
#define CallNPP_WriteReadyProc(FUNC, NPParg, NPStreamPtr) \
|
(int32)CallUniversalProc((UniversalPro
cPtr)(FUNC), uppNPP_WriteReadyProcInfo, (NPParg), (NPStreamPtr))

#else
|
typedef int32 (*NPP_WriteReadyUPP)(NPP instance, NPStream* stream);
#define NewNPP_WriteReadyProc(FUNC) \
|
((NPP_WriteReadyUPP)(FUNC))
#define CallNPP_WriteReadyProc(FUNC, NPParg, NPStreamPtr) \
|
(*(FUNC))(NPParg, NPStreamPtr)

#endif
|
/* NPP_Write */
|
#if GENERATINGCFM
|
typedef UniversalProcPtr NPP_WriteUPP;
enum {
|
kThinkCStackBased
|
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
|
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPStream *)))
|
STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(int32)))
|
STACK_ROUTINE_PARAMETER(4, SIZE_CODE(sizeof(int32)))
|
STACK_ROUTINE_PARAMETER(5, SIZE_CODE(sizeof(void*)))
|
RESULT_SIZE(SIZE_CODE(sizeof(int32)))
};
#define NewNPP_WriteProc(FUNC)
|
(NPP_WriteUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_WriteProcInfo,
GetCurrentArchitecture())
|

```

```

#define CallNPP_WriteProc(FUNC, NPParg, NPStreamPtr, offsetArg,
lenArg, bufferPtr) \
(int32)CallUniversalProc( (UniversalPro
cPtr) (FUNC), uppNPP_WriteProcInfo, (NPParg), (NPStreamPtr),
(offsetArg), (lenArg), (bufferPtr))

#else

typedef int32 (*NPP_WriteUPP)(NPP instance, NPStream* stream, int32
offset, int32 len, void* buffer);
#define NewNPP_WriteProc(FUNC) \
((NPP_WriteUPP) (FUNC))

#define CallNPP_WriteProc(FUNC, NPParg, NPStreamPtr, offsetArg,
lenArg, bufferPtr) \
(* (FUNC)) ((NPParg), (NPStreamPtr),
(offsetArg), (lenArg), (bufferPtr))

#endif

/* NPP_StreamAsFile */

#if GENERATINGCFM

typedef UniversalProcPtr NPP_StreamAsFileUPP;
enum {
    uppNPP_StreamAsFileProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPStream *)))
    STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(const char *)))
    RESULT_SIZE(SIZE_CODE(0))
};

#define NewNPP_StreamAsFileProc(FUNC) \
(NPP_StreamAsFileUPP)
NewRoutineDescriptor((ProcPtr) (FUNC), uppNPP_StreamAsFileProcInfo,
GetCurrentArchitecture())
#define CallNPP_StreamAsFileProc(FUNC, ARG1, ARG2, ARG3) \
(void)CallUniversalProc( (UniversalProc
Ptr) (FUNC), uppNPP_StreamAsFileProcInfo, (ARG1), (ARG2), (ARG3))

#else

typedef void (*NPP_StreamAsFileUPP)(NPP instance, NPStream* stream,
const char* fname);


```

```

#define NewNPP_StreamAsFileProc(FUNC) \
    ((NPP_StreamAsFileUPP) (FUNC))
#define CallNPP_StreamAsFileProc(FUNC, ARG1, ARG2, ARG3) \
    (* (FUNC)) ((ARG1), (ARG2), (ARG3))
#endif

/* NPP_Print */

#if GENERATINGCFM

typedef UniversalProcPtr NPP_PrintUPP;
enum {
    uppNPP_PrintProcInfo =
kThinkCStackBased

STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPPrint *)))
RESULT_SIZE(SIZE_CODE(0))
};
#define NewNPP_PrintProc(FUNC) \
    (NPP_PrintUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_PrintProcInfo, \
GetCurrentArchitecture())
#define CallNPP_PrintProc(FUNC, NPParg, voidPtr) \
    (void)CallUniversalProc((UniversalProc \
Ptr)(FUNC), uppNPP_PrintProcInfo, (NPParg), (voidPtr))
#else

typedef void (*NPP_PrintUPP)(NPP instance, NPPrint* platformPrint);
#define NewNPP_PrintProc(FUNC) \
    ((NPP_PrintUPP) (FUNC))
#define CallNPP_PrintProc(FUNC, NPParg, NPPrintArg) \
    (* (FUNC)) ((NPParg), (NPPrintArg))
#endif

/* NPP_HandleEvent */

#if GENERATINGCFM

typedef UniversalProcPtr NPP_HandleEventUPP;
enum {

```

```

        uppNPP_HandleEventProcInfo =
kThinkCStackBased
        |
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
        |
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(void *)))
        |
RESULT_SIZE(SIZE_CODE(sizeof(int16)))
};

#define NewNPP_HandleEventProc(FUNC) \
        |
        (NPP_HandleEventUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_HandleEventProcInfo,
GetCurrentArchitecture())
#define CallNPP_HandleEventProc(FUNC, NPParg, voidPtr) \
        |
        (int16)CallUniversalProc((UniversalPro
cPtr)(FUNC), uppNPP_HandleEventProcInfo, (NPParg), (voidPtr))

#else
typedef int16 (*NPP_HandleEventUPP)(NPP instance, void* event);
#define NewNPP_HandleEventProc(FUNC) \
        |
        ((NPP_HandleEventUPP) (FUNC))
#define CallNPP_HandleEventProc(FUNC, NPParg, voidPtr) \
        |
        (* (FUNC)) ((NPParg), (voidPtr))

#endif

/*
 * Netscape entry points
 */
/* NPN_GetUrl */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_GetURLUPP;
enum {
        uppNPN_GetURLProcInfo =
kThinkCStackBased
        |
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
        |
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(const char*)))
        |
STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(const char*)))

```

```

RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPN_GetURLProc(FUNC) \
    (NPN_GetURLUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_GetURLProcInfo,
GetCurrentArchitecture())
#define CallNPN_GetURLProc(FUNC, ARG1, ARG2, ARG3) \
    (NPError)CallUniversalProc((UniversalP
rocPtr)(FUNC), uppNPN_GetURLProcInfo, (ARG1), (ARG2), (ARG3))
#else

typedef NPError (*NPN_GetURLUPP)(NPP instance, const
char* url, const char* window);
#define NewNPN_GetURLProc(FUNC) \
    ((NPN_GetURLUPP)(FUNC))
#define CallNPN_GetURLProc(FUNC, ARG1, ARG2, ARG3) \
    ((*FUNC))((ARG1), (ARG2), (ARG3))
#endif

/* NPN_PostUrl */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_PostURLUPP;
enum {
    uppNPN_PostURLProcInfo =
kThinkCStackBased
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(const char*)))
STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(const char*)))
STACK_ROUTINE_PARAMETER(4, SIZE_CODE(sizeof(uint32)))
STACK_ROUTINE_PARAMETER(5, SIZE_CODE(sizeof(const char*)))
STACK_ROUTINE_PARAMETER(6, SIZE_CODE(sizeof(NPBool)))
RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};
#define NewNPN_PostURLProc(FUNC) \
    (NPN_PostURLUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_PostURLProcInfo,
GetCurrentArchitecture())

```

```

#define CallNPN_PostURLProc(FUNC, ARG1, ARG2, ARG3, ARG4, ARG5,
ARG6) \
    (NPError)CallUniversalProc((UniversalP
rocPtr)(FUNC), uppNPN_PostURLProcInfo, (ARG1), (ARG2), (ARG3),
(ARG4), (ARG5), (ARG6))
#else

typedef NPError (*NPN_PostURLUPP)(NPP instance, const char* url,
const char* window, uint32 len, const char* buf, NPBool file);
#define NewNPN_PostURLProc(FUNC) \
    ((NPN_PostURLUPP) (FUNC))

#define CallNPN_PostURLProc(FUNC, ARG1, ARG2, ARG3, ARG4, ARG5,
ARG6) \
    ((* (FUNC)) ((ARG1), (ARG2), (ARG3),
(ARG4), (ARG5), (ARG6)))
#endif

/* NPN_RequestRead */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_RequestReadUPP;
enum {
    uppNPN_RequestReadProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPStream *)))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPByteRange *)))
    RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPN_RequestReadProc(FUNC) \
    (NPN_RequestReadUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_RequestReadProcInfo,
GetCurrentArchitecture())
#define CallNPN_RequestReadProc(FUNC, stream, range) \
    (NPError)CallUniversalProc((UniversalP
rocPtr)(FUNC), uppNPN_RequestReadProcInfo, (stream), (range))

#else

typedef NPError (*NPN_RequestReadUPP)(NPStream*
stream, NPByteRange* rangeList);
#define NewNPN_RequestReadProc(FUNC) \
    ((NPN_RequestReadUPP) (FUNC))

#define CallNPN_RequestReadProc(FUNC, stream, range) \

```

```

(* (FUNC)) ((stream), (range))

#endif

/* NPN_NewStream */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_NewStreamUPP;
enum {
    uppNPN_NewStreamProcInfo =
kThinkCStackBased
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPMIMEType)))
STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(NPStream *)))
STACK_ROUTINE_PARAMETER(4, SIZE_CODE(sizeof(NPBool)))
STACK_ROUTINE_PARAMETER(5, SIZE_CODE(sizeof(uint16*)))
RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPN_NewStreamProc(FUNC)
                                         \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_NewStreamProcInfo,
GetCurrentArchitecture())
#define CallNPN_NewStreamProc(FUNC, npp, type, stream) \
                                         \
(NPError)CallUniversalProc((UniversalProcPtr)(FUNC), uppNPN_NewStreamProcInfo, (npp), (type), (stream))

#else

typedef NPError (*NPN_NewStreamUPP)(NPP instance,
NPMIMEType type, NPStream* stream);
#define NewNPN_NewStreamProc(FUNC)
                                         \
((NPN_NewStreamUPP)(FUNC))
#define CallNPN_NewStreamProc(FUNC, npp, type, stream) \
                                         \
(* (FUNC)) ((npp), (type), (stream))

#endif

/* NPN Write */

```

```

#ifndef GENERATINGCFM

typedef UniversalProcPtr NPN_WriteUPP;
enum {
    uppNPN_WriteProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP )))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPStream *)))
    STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(int32)))
    STACK_ROUTINE_PARAMETER(4, SIZE_CODE(sizeof(void*)))
RESULT_SIZE(SIZE_CODE(sizeof(int32)))
};

#define NewNPN_WriteProc(FUNC)
    (NPN_WriteUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_WriteProcInfo,
GetCurrentArchitecture())
#define CallNPN_WriteProc(FUNC, npp, stream, len, buffer) \
    (int32)CallUniversalProc((UniversalPro
cPtr)(FUNC), uppNPN_WriteProcInfo, (npp), (stream), (len), (buffer))

#else

typedef int32 (*NPN_WriteUPP)(NPP instance, NPStream* stream, int32
len, void* buffer);
#define NewNPN_WriteProc(FUNC)
    ((NPN_WriteUPP) (FUNC))
#define CallNPN_WriteProc(FUNC, npp, stream, len, buffer) \
    (* (FUNC)) ((npp), (stream), (len),
(buffer))

#endif

/* NPN_DestroyStream */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_DestroyStreamUPP;
enum {
    uppNPN_DestroyStreamProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP )))

```

```

STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPStream *)))
|
STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(NPError)))
|
RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};

#define NewNPN_DestroyStreamProc(FUNC) \
    (NPN_DestroyStreamUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_DestroyStreamProcInfo, \
GetCurrentArchitecture())
#define CallNPN_DestroyStreamProc(FUNC, npp, stream, err) \
    (NPError)CallUniversalProc((UniversalP \
rocPtr)(FUNC), uppNPN_DestroyStreamProcInfo, (npp), (stream), (err))

#else

typedef NPError (*NPN_DestroyStreamUPP)(NPP instance, NPStream* \
stream, NPError reason);
#define NewNPN_DestroyStreamProc(FUNC) \
    ((NPN_DestroyStreamUPP) (FUNC))
#define CallNPN_DestroyStreamProc(FUNC, npp, stream, err) \
    ((* (FUNC)) ((npp), (stream), (err)))

#endif

/* NPN_Status */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_StatusUPP;
enum {
    uppNPN_StatusProcInfo =
kThinkCStackBased
|
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
|
STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(char *)))
};

#define NewNPN_StatusProc(FUNC) \
    (NPN_StatusUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_StatusProcInfo, \
GetCurrentArchitecture())
#define CallNPN_StatusProc(FUNC, npp, msg) \

```

```

                (void)CallUniversalProc( (UniversalProc
Ptr) (FUNC), uppNPN_StatusProcInfo, (npp), (msg))

#else

typedef void (*NPN_StatusUPP)(NPP instance, const char* message);
#define NewNPN_StatusProc(FUNC) \
                ((NPN_StatusUPP) (FUNC))
#define CallNPN_StatusProc(FUNC, npp, msg) \
                (* (FUNC)) ((npp), (msg))

#endif

/* NPN_UserIdentity */
#if GENERATINGCFM

typedef UniversalProcPtr NPN_UserIdentityUPP;
enum {
    uppNPN_UserIdentityProcInfo = kThinkCStackBased
        | STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPP)))
        | RESULT_SIZE(SIZE_CODE(sizeof(const char *)))
};

#define NewNPN_UserIdentityProc(FUNC) \
                (NPN_UserIdentityUPP)
NewRoutineDescriptor((ProcPtr) (FUNC), uppNPN_UserIdentityProcInfo,
GetCurrentArchitecture())
#define CallNPN_UserIdentityProc(FUNC, ARG1) \
                \
                (const
char*)CallUniversalProc((UniversalProcPtr) (FUNC),
uppNPN_UserIdentityProcInfo, (ARG1))

#else

typedef const char* (*NPN_UserIdentityUPP)(NPP instance);
#define NewNPN_UserIdentityProc(FUNC) \
                ((NPN_UserIdentityUPP) (FUNC))
#define CallNPN_UserIdentityProc(FUNC, ARG1) \
                \
                (* (FUNC)) ((ARG1))

#endif

/* NPN_MemAlloc */
#if GENERATINGCFM

typedef UniversalProcPtr NPN_MemAllocUPP;
enum {
    uppNPN_MemAllocProcInfo =
kThinkCStackBased

```

```

STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(uint32)))
|           |
RESULT_SIZE(SIZE_CODE(sizeof(void *)))
};

#define NewNPN_MemAllocProc(FUNC)
|           \
(NPN_MemAllocUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_MemAllocProcInfo,
GetCurrentArchitecture())
#define CallNPN_MemAllocProc(FUNC, ARG1)
|           \
(void*)CallUniversalProc((UniversalProc
cPtr)(FUNC), uppNPN_MemAllocProcInfo, (ARG1))

#else
typedef void* (*NPN_MemAllocUPP)(uint32 size);
#define NewNPN_MemAllocProc(FUNC)
|           \
((NPN_MemAllocUPP) (FUNC))
#define CallNPN_MemAllocProc(FUNC, ARG1)
|           \
(* (FUNC)) ((ARG1))

#endif

/* NPN_MemFree */
#if GENERATINGCFM

typedef UniversalProcPtr NPN_MemFreeUPP;
enum {
                uppNPN_MemFreeProcInfo =
kThinkCStackBased
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(void *)))
};

#define NewNPN_MemFreeProc(FUNC)
|           \
(NPN_MemFreeUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_MemFreeProcInfo,
GetCurrentArchitecture())
#define CallNPN_MemFreeProc(FUNC, ARG1)
|           \
(void)CallUniversalProc((UniversalProc
Ptr)(FUNC), uppNPN_MemFreeProcInfo, (ARG1))

#else
typedef void (*NPN_MemFreeUPP)(void* ptr);

```

```

#define NewNPN_MemFreeProc(FUNC) \
    ((NPN_MemFreeUPP)(FUNC))
#define CallNPN_MemFreeProc(FUNC, ARG1) \
    (* (FUNC))((ARG1))

#endif

/* NPN_MemFlush */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_MemFlushUPP;
enum {
    uppNPN_MemFlushProcInfo =
kThinkCStackBased
STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(uint32)))
RESULT_SIZE(SIZE_CODE(sizeof(uint32)))
};

#define NewNPN_MemFlushProc(FUNC) \
    (NPN_MemFlushUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_MemFlushProcInfo,
GetCurrentArchitecture())
#define CallNPN_MemFlushProc(FUNC, ARG1) \
    (uint32)CallUniversalProc((UniversalProcPtr)(FUNC),
uppNPN_MemFlushProcInfo, (ARG1))

#else

typedef uint32 (*NPN_MemFlushUPP)(uint32 size);
#define NewNPN_MemFlushProc(FUNC) \
    ((NPN_MemFlushUPP)(FUNC))
#define CallNPN_MemFlushProc(FUNC, ARG1) \
    (* (FUNC))((ARG1))

#endif

/* NPN_ReloadPlugins */

#if GENERATINGCFM

typedef UniversalProcPtr NPN_ReloadPluginsUPP;
enum {

```

```

 uppNPN_ReloadPluginsProcInfo =
kThinkCStackBased
|_ STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPBool)))
|_ RESULT_SIZE(SIZE_CODE(0))
};

#define NewNPN_ReloadPluginsProc(FUNC) \
    (NPN_ReloadPluginsUPP) \
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPN_ReloadPluginsProcInfo, \
GetCurrentArchitecture())
#define CallNPN_ReloadPluginsProc(FUNC, ARG1) \
    (void)CallUniversalProc((UniversalProc \
Ptr)(FUNC), uppNPN_ReloadPluginsProcInfo, (ARG1))

#else

typedef void (*NPN_ReloadPluginsUPP)(NPBool reloadPages);
#define NewNPN_ReloadPluginsProc(FUNC) \
    ((NPN_ReloadPluginsUPP)(FUNC))
#define CallNPN_ReloadPluginsProc(FUNC, ARG1) \
    (*(FUNC))(ARG1)

#endif

/********************* \
* ***** \
* The actual plugin function table definitions \
* ***** \
******************/ \
typedef struct _NPPluginFuncs {
    uint16 size;
    uint16 version;
    NPP_NewUPP newp;
    NPP_DestroyUPP destroy;
    NPP_SetWindowUPP setwindow;
    NPP_NewStreamUPP newstream;
    NPP_DestroyStreamUPP destroystream;
        NPP_StreamAsFileUPP asfile;
    NPP_WriteReadyUPP writeready;
    NPP_WriteUPP write;
    NPP_PrintUPP print;
    NPP_HandleEventUPP event;
} NPPluginFuncs;

```

```

typedef struct _NPNNetscapeFuncs {
    uint16 size;
    uint16 version;
    NPN_GetURLUPP geturl;
    NPN_PostURLUPP posturl;
    NPN_RequestReadUPP requestread;
    NPN_NewStreamUPP newstream;
    NPN_WriteUPP write;
    NPN_DestroyStreamUPP destroystream;
    NPN_StatusUPP status;
    NPN_UserAgentUPP uagent;
    NPN_MemAllocUPP memalloc;
    NPN_MemFreeUPP memfree;
    NPN_MemFlushUPP memflush;
    NPN_ReloadPluginsUPP reloadplugins;
} NPNNetscapeFuncs;

```

```

#ifndef XP_MAC
/*********************************************
* ****
* Mac platform-specific plugin glue stuff
*****
*/
/*
 * Main entry point of the plugin.
 * This routine will be called when the plugin is loaded. The
function
 * tables are passed in and the plugin fills in the NPPluginFuncs
table
 * and NPPShutdownUPP for Netscape's use.
 */
#endif GENERATINGCFM

typedef UniversalProcPtr NPP_MainEntryUPP;
enum {
    uppNPP_MainEntryProcInfo =
kThinkCStackBased
    STACK_ROUTINE_PARAMETER(1, SIZE_CODE(sizeof(NPNNetscapeFuncs*)))
    STACK_ROUTINE_PARAMETER(2, SIZE_CODE(sizeof(NPPluginFuncs*)))
    STACK_ROUTINE_PARAMETER(3, SIZE_CODE(sizeof(NPP_ShutdownUPP*)))
    RESULT_SIZE(SIZE_CODE(sizeof(NPError)))
};
#define NewNPP_MainEntryProc(FUNC)
\
```

```

(NPP_MainEntryUPP)
NewRoutineDescriptor((ProcPtr)(FUNC), uppNPP_MainEntryProcInfo,
GetCurrentArchitecture())
#define CallNPP_MainEntryProc(FUNC, netscapeFunc, pluginFunc,
shutdownUPP)
                                         \
CallUniversalProc((UniversalProcPtr)(F
UNC), (ProcInfoType)uppNPP_MainEntryProcInfo, (netscapeFunc),
(pluginFunc), (shutdownUPP))

#else

typedef NPError (*NPP_MainEntryUPP)(NPNetScapeFuncs*,
NPPluginFuncs*, NPP_ShutdownUPP*);
#define NewNPP_MainEntryProc(FUNC)
                                         \
((NPP_MainEntryUPP)(FUNC))
#define CallNPP_MainEntryProc(FUNC, netscapeFunc, pluginFunc,
shutdownUPP)
                                         \
(* (FUNC)) ((netscapeFunc),
(pluginFunc), (shutdownUPP))

#endif
#endif /* MAC */

#ifndef _WINDOWS

#ifndef __cplusplus
extern "C" {
#endif

/* plugin meta member functions */

NPError WINAPI NP_GetEntryPoints(NPPluginFuncs* pFuncs);

NPError WINAPI NP_Initialize(NPNetScapeFuncs* pFuncs);

NPError WINAPI NP_Shutdown();

#ifndef __cplusplus
}
#endif

#endif /* _WINDOWS */

#endif /* *_NPUPP_H_ */

//-----
// -----
// 
```

```

//                                         File: CHyperCD.h
//                                         Functions:
//                                         HyperCD movie playing routines
// -----
// -----
// HyperCD Error Codes
#define AEC_POSITIONFAIL      1

// CHyperCD class
class CHyperCD
{
    // Construction
public:
    CHyperCD();
    ~CHyperCD();

    // Attributes
public:
    HWND           mOpen;           // Attributes
    BOOL          mPlaying;
    BOOL          mMovieWnd;
    BOOL          mDisableRButtonDown;

    private:
    UINT           mDeviceID;
    int            mErrorCode;
    DWORD          mMCIErrorCode;

    // Operations
public:
    BOOL          Realize(void);   // Operations
    BOOL          Open();          // Operations
    void          Close();         // Operations
    Update(void);  Start();        // Operations
    BOOL          SurePlay();      // Operations
    BOOL          Stop();          // Operations
    BOOL          Rewind();         // Operations
    (void);
    void          (BOOL bLoop);
    (BOOL bLoop);
    (void);
    (void);

    // -----
    // -----

```

```

        BOOL           Forward
(void) ;

        BOOL
FrameForward (void) ;
        BOOL
FrameBack (void) ;
        int
GetWidth (void) ;
        int
GetHeight (void) ;
        DWORD
GetLength (void) ;
        DWORD
GetPosition (void) ;
        DWORD           GetSpeed
(void) ;

        CString GetErrorString (void) ;
        BOOL           Center
(void) ;

        BOOL           Full
(void) ;

        BOOL
InstallXioModule(void) ;
        BOOL
RemoveXioModule(void) ;
        void
GetFile(char* pszFile) ;

private:
};

#ifndef __PLGWND_H__
#define __PLGWND_H__

#include "npapi.h"
#include "stdafx.h"
///////////////////////////////
// // //

#define ID_VIDEO PLAY      1000
#define ID_VIDEO_STOP    1001
#define ID_VIDEO_REWIND   1002
#define ID_VIDEO_FORWARD  1003
#define ID_VIDEO_FRAME_BACK 1004
#define ID_VIDEO_FRAME_FORWARD 1005

class CPluginWindow;
class CHyperCD;

//
// Instance state information about the plugin.
//



```

```

// *Note*:
// struct to hold per-instance
//           information that you'll need in the
//           various functions in this file.
//
typedef struct _PluginInstance {
    CPluginWindow *window;           // platform specific
window handle:
    CHyperCD * cHypercd;          //
} PluginInstance;
see the NPWindow structure in
BOOL bAutoStart;                                //

NPAPI.H for the shell window
// structure
    BOOL bLoop;
    char InformationField[128];
    uint16 mode;
    uint16 fMode;
} PluginInstance;

// CPluginWindow:
//
class CPluginWindow : public CWnd
{
protected:
    PluginInstance * m_data;
    CWnd * m_videoWnd;
public:
    CPluginWindow();
    void StoreData(PluginInstance *);
    virtual WNDPROC* GetSuperWndProcAddr();

    //{{AFX_MSG( CMainWindow )
    afx_msg void OnPaint();
    afx_msg void OnPaletteChanged(CWnd*
pWnd);
    afx_msg void OnLButtonDown(UINT flags,
CPoint point);
    afx_msg void OnRButtonDown(UINT flags, CPoint point);
    afx_msg void OnPlay();
    afx_msg void OnStop();
    afx_msg void OnRewind();
    afx_msg void OnForward();
    afx_msg void OnFrameBack();
    afx_msg void OnFrameForward();
    //}}AFX_MSG

    DECLARE_MESSAGE_MAP()
};

#endif
// stdafx.h : include file for standard system include files,

```

```
// or project specific include files that are used frequently, but
//      are changed infrequently
//
#include <afxwin.h>           // MFC core and standard components
#include <afxext.h>            // MFC extensions
#include <afxole.h>             // MFC OLE classes
#include <afxodlgs.h>           // MFC OLE dialog classes
#include <afxdisp.h>             // MFC OLE automation classes
#include <afxdb.h>              // MFC database classes
```

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**WHAT I CLAIM IS:**

**CLAIM 1.** A method of transmitting video and/or graphic data files over the Internet or Intranet from a Web site, comprising:

(a) encrypting the video and/or graphic data and storing it at a Web site associated with a server;

(b) encrypting a video player and storing it at the Web site;

(c) downloading the encrypted video and/or graphic data and encrypted video player of said steps (a) and (b) to a requesting computer via the Internet or Intranet;

(d) prior to said step (c), requesting the downloading of said encrypted video and/or graphic data and encrypted video player by the requesting computer;

(e) decrypting the video and/or graphic data and video player at the requesting computer; and

(f) playing back the decrypted video and/or graphic data via the decrypted video player.

**CLAIM 2.** A method of playing encrypted video and/or graphic data transmitted over the Internet or Intranet from a Web site, comprising:

(a) requesting by an end user's computer the downloading of encrypted video and/or graphic data and an encrypted video player from a Web site of the Internet or Intranet;

(b) receiving the requested encrypted video and/or graphic data and an encrypted video player from the Web site of the Internet or Intranet;

(c) decrypting the encrypted video and/or graphic data and encrypted video player at the requesting computer; and

(f) playing back the decrypted video and/or graphic data via the decrypted video player at the end user's computer.

**CLAIM 3.** A method of preventing unauthorized use of video and/or graphic data, comprising:

(a) encrypting the video and/or graphic data;

(b) encrypting a video player;

(c) storing at least one of the encrypted video and encrypted player of said steps (a) and (b) at a Web site of the Internet or Intranet;

(d) downloading at least one of the encrypted video and encrypted video player of said steps (a) and (b) to a requesting computer via the Internet or Intranet;

(e) decrypting the encrypted video and/or graphic data and encrypted video player at the requesting computer; and

(f) playing the decrypted video and/or graphic at the requesting computer via the decrypted player.

**CLAIM 4.** The method of preventing unauthorized use of video and/or graphic data according to claim 3, wherein said step (c) comprises storing both the encrypted video and encrypted player of said steps (a) and (b) at the Web site of the Internet or Intranet.

**CLAIM 5.** The method of preventing unauthorized use of video

and/or graphic data according to claim 3, wherein said step (c) comprises storing the encrypted player of said step (b) at the Web site of the Internet or Intranet, said step (d) comprising transmitting the encrypted player to the requesting computer.

**CLAIM 6.** The method of preventing unauthorized use of video and/or graphic data, according to claim 5, wherein said step (a) comprises storing the encrypted video files at a requesting end-user's computer.

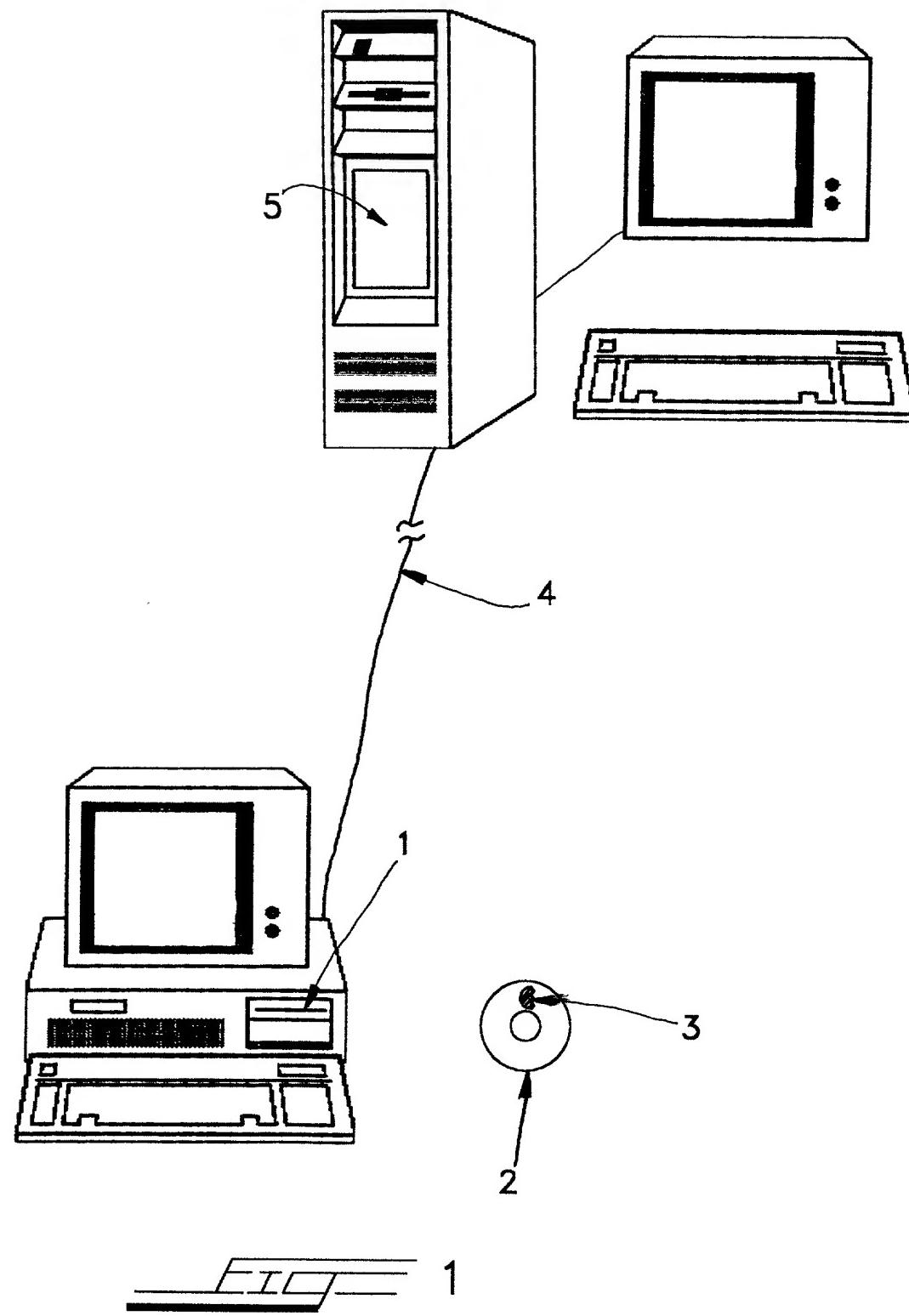
**CLAIM 7.** The method of preventing unauthorized use of video and/or graphic data, according to claim 3, wherein said step (c) comprises storing the encrypted video and/or graphic data of said step (a) at the Web site of the Internet or Intranet, said step (d) comprising transmitting the encrypted video and/or graphic data to the requesting computer.

**CLAIM 8.** The method of preventing unauthorized use of video and/or graphic data, according to claim 7, wherein said step (b) comprises storing the encrypted player at a requesting end-user's computer.

#### **ABSTRACT OF THE DISCLOSURE**

A method of transmitting protected video and/or graphic data over the Internet from a Web site, by encrypting the video and/or graphic data and storing it at a Web site associated with a server, and by encrypting a video player and storing it at the Web site. Both are then downloaded to a requesting computer via the Internet or Intranet. The requesting computer decrypts the video and/or graphic data and video player via a previously supplied decryption key, so that the video may be played back by the decrypted player.

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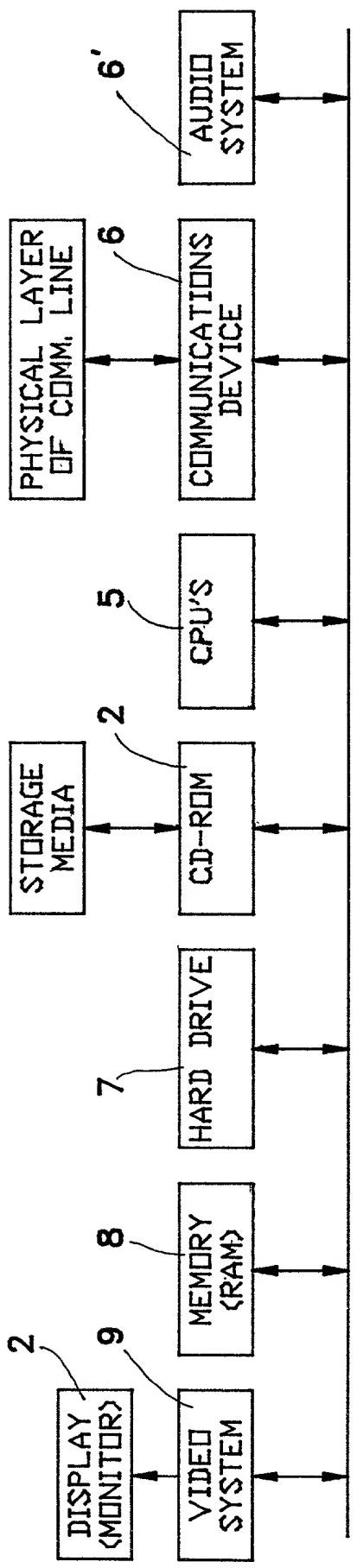


FIGURE 2

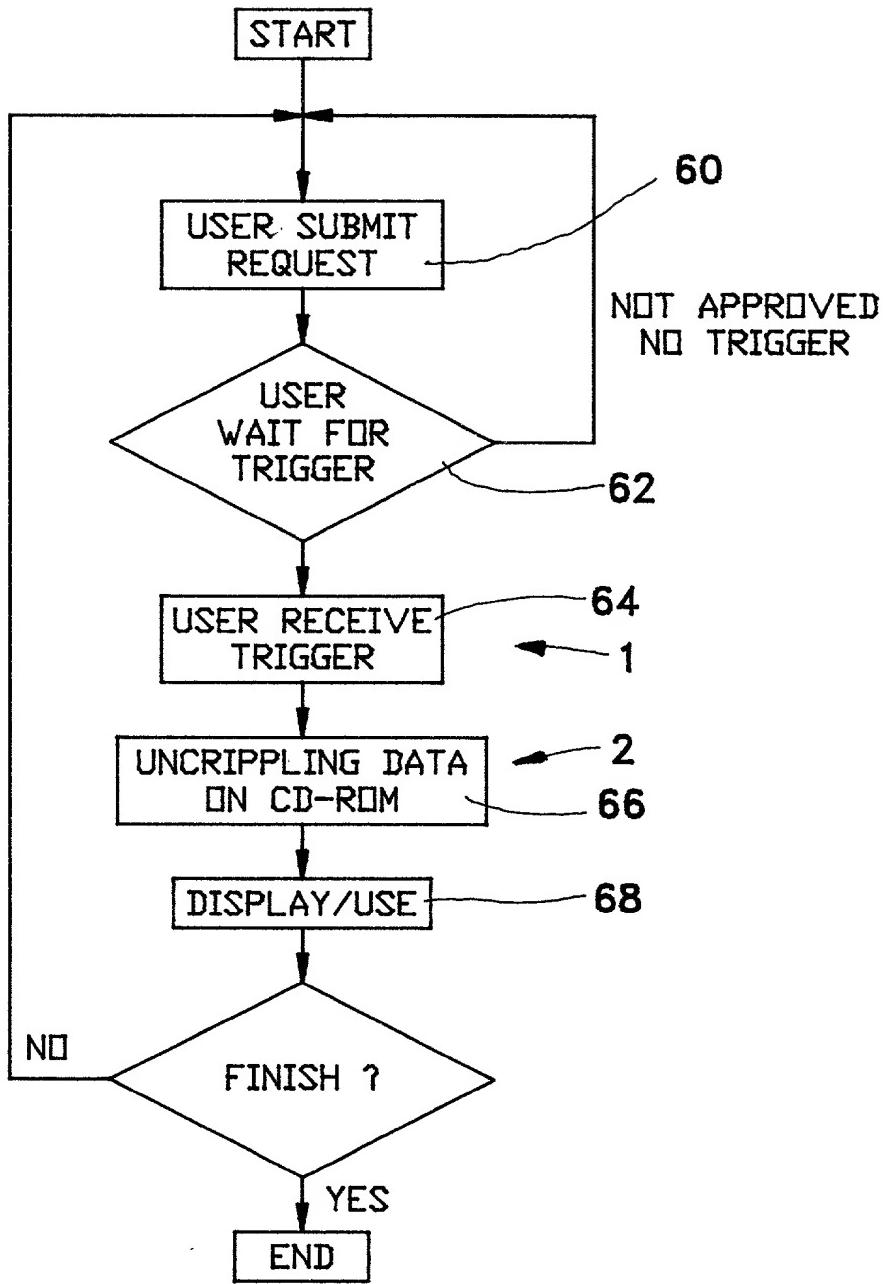


FIG 3

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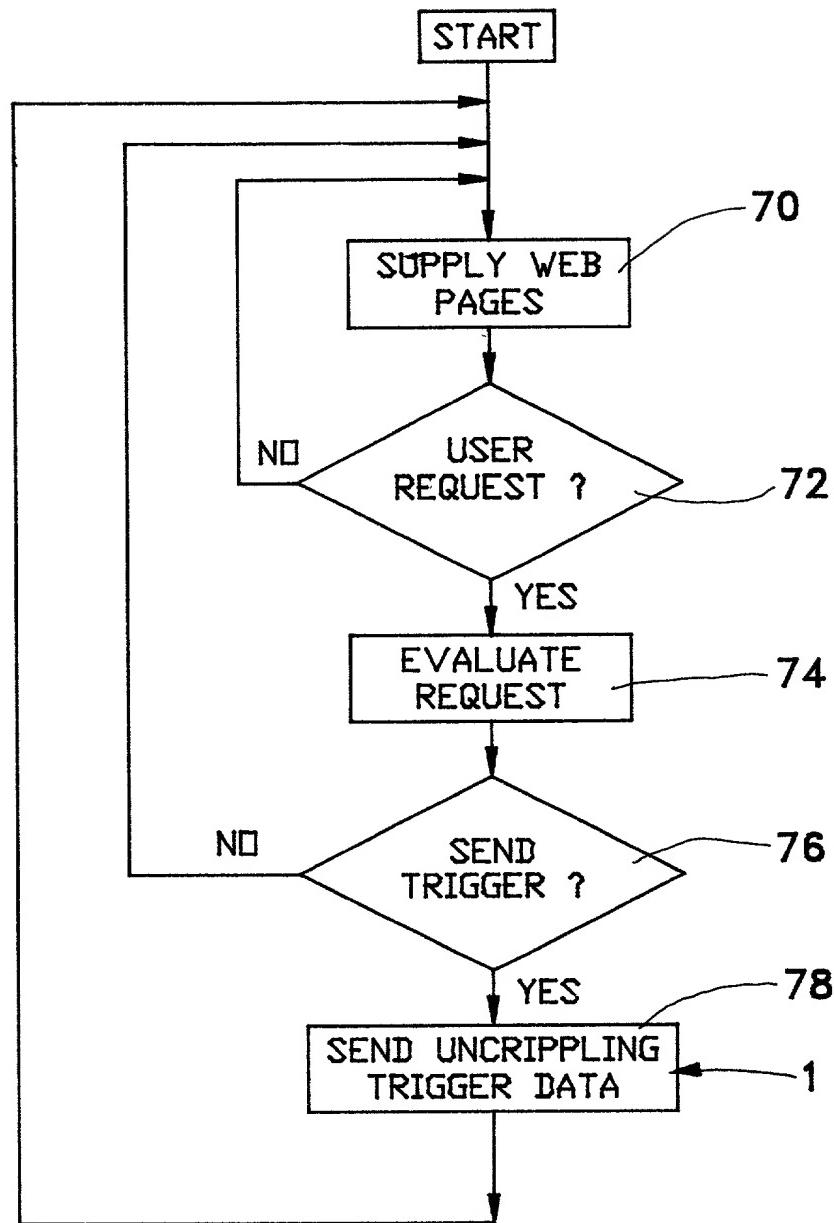
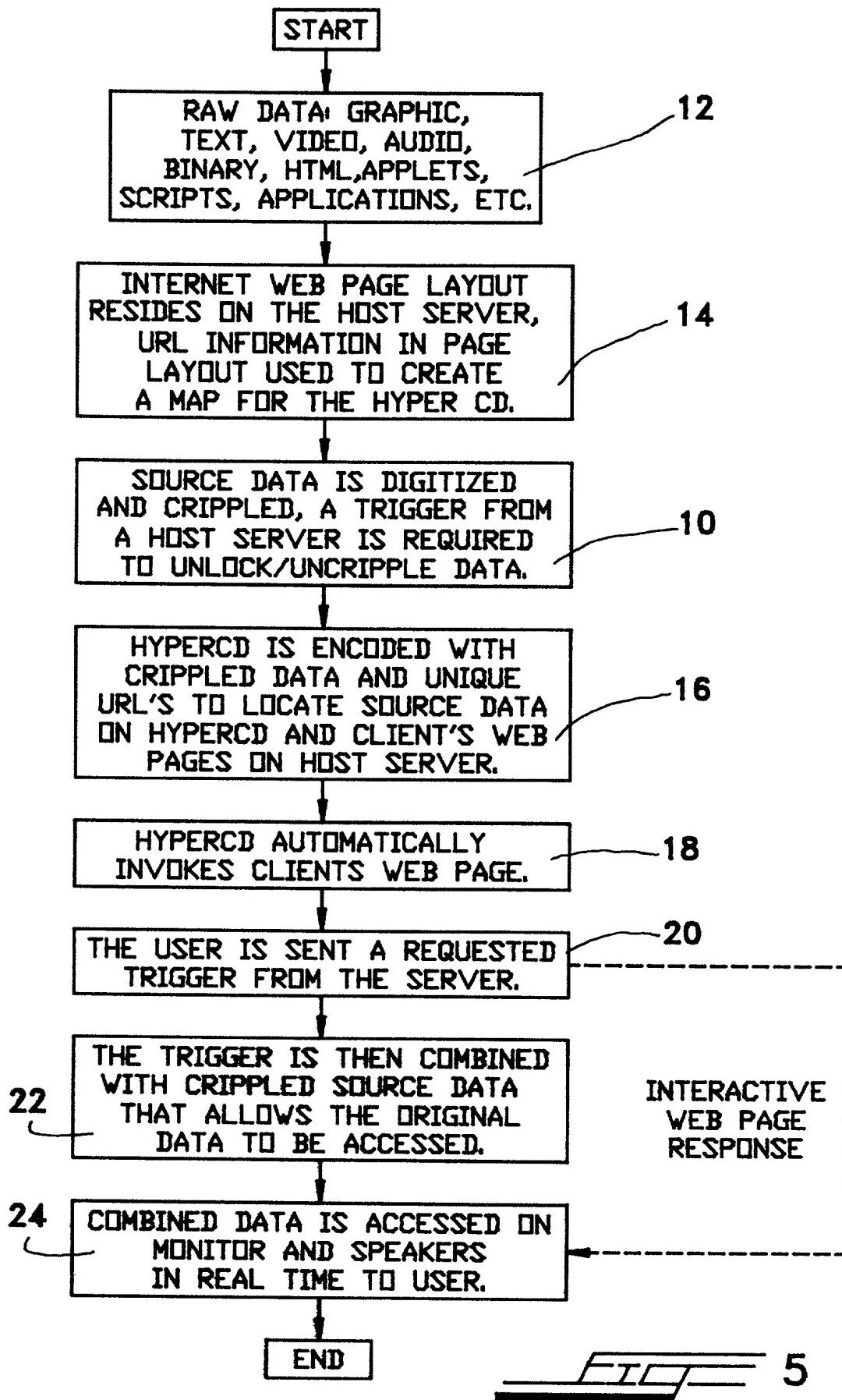


FIG 4

INTERACTIVE  
WEB PAGE  
RESPONSE

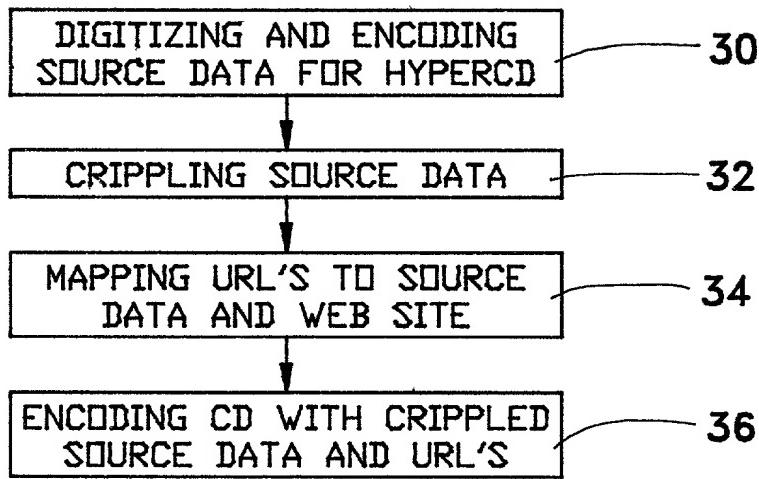


FIG 6

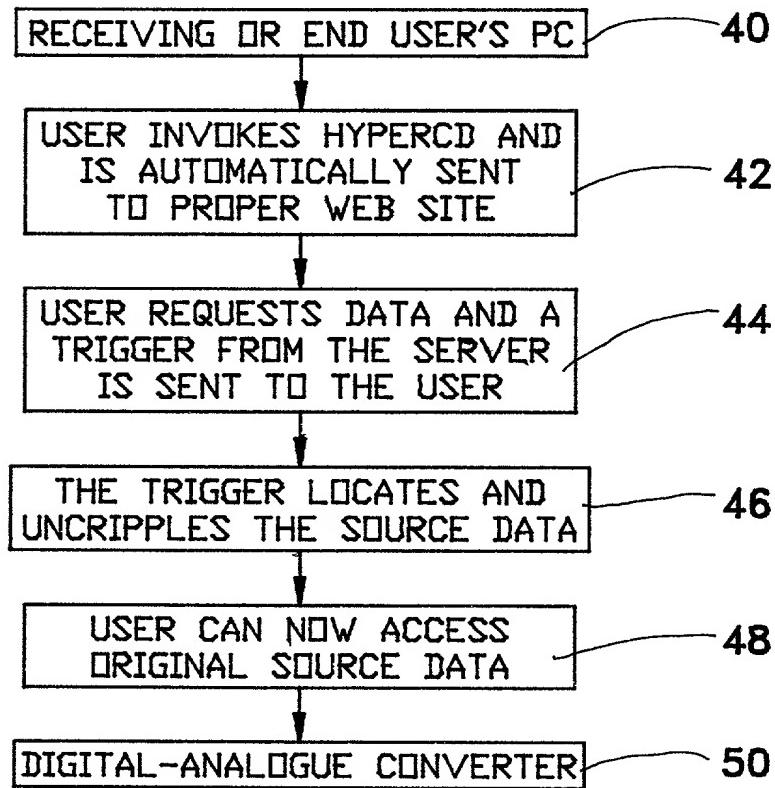
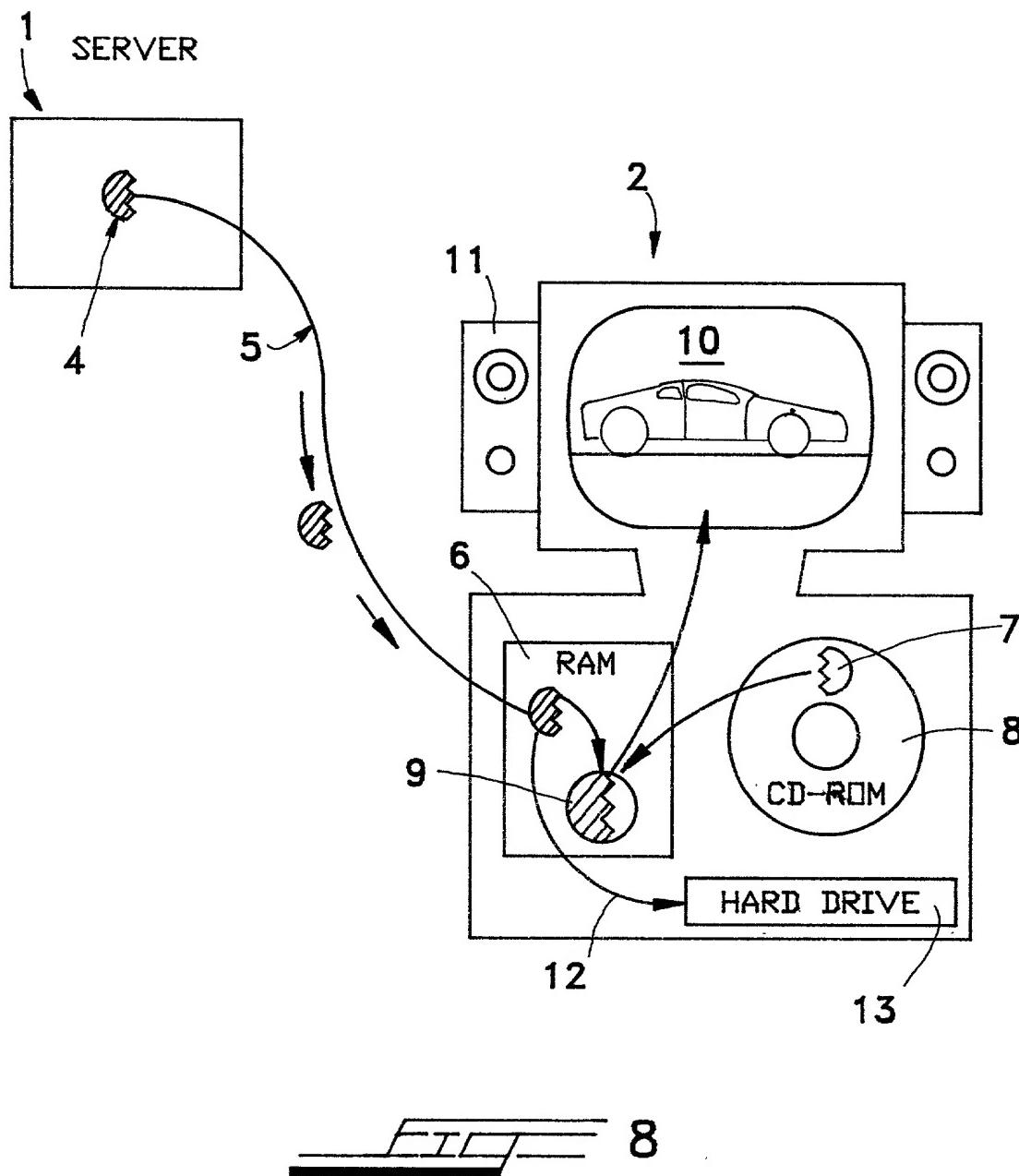
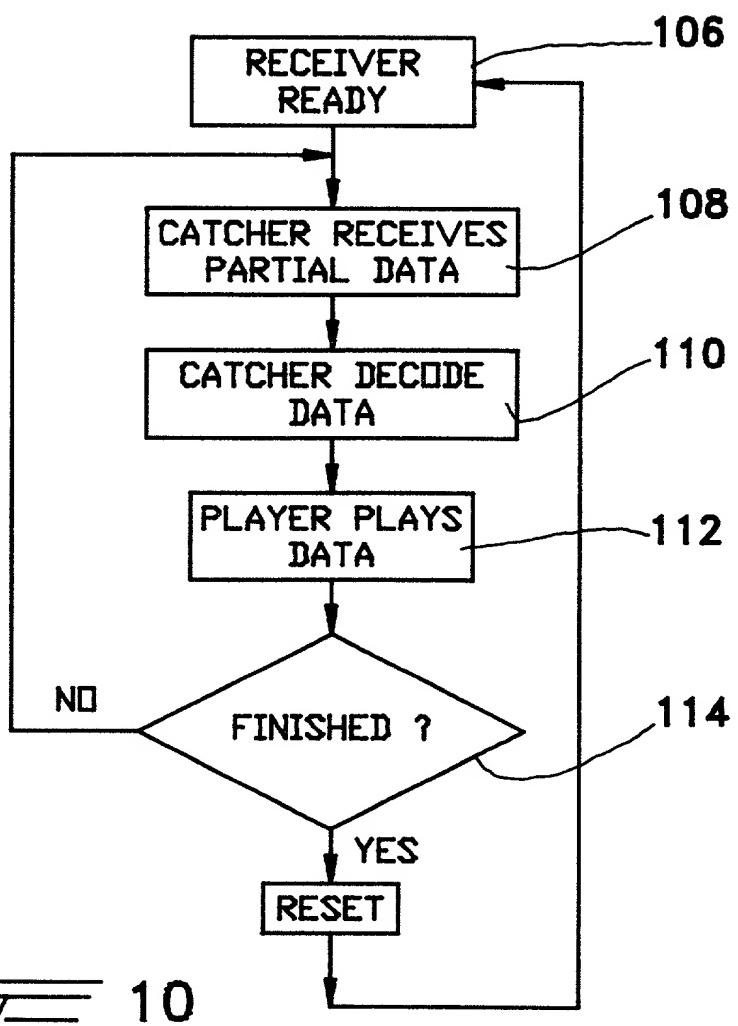
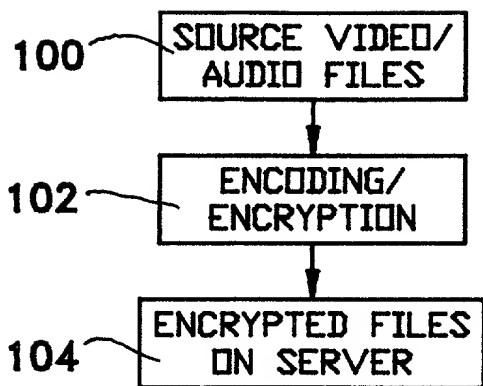


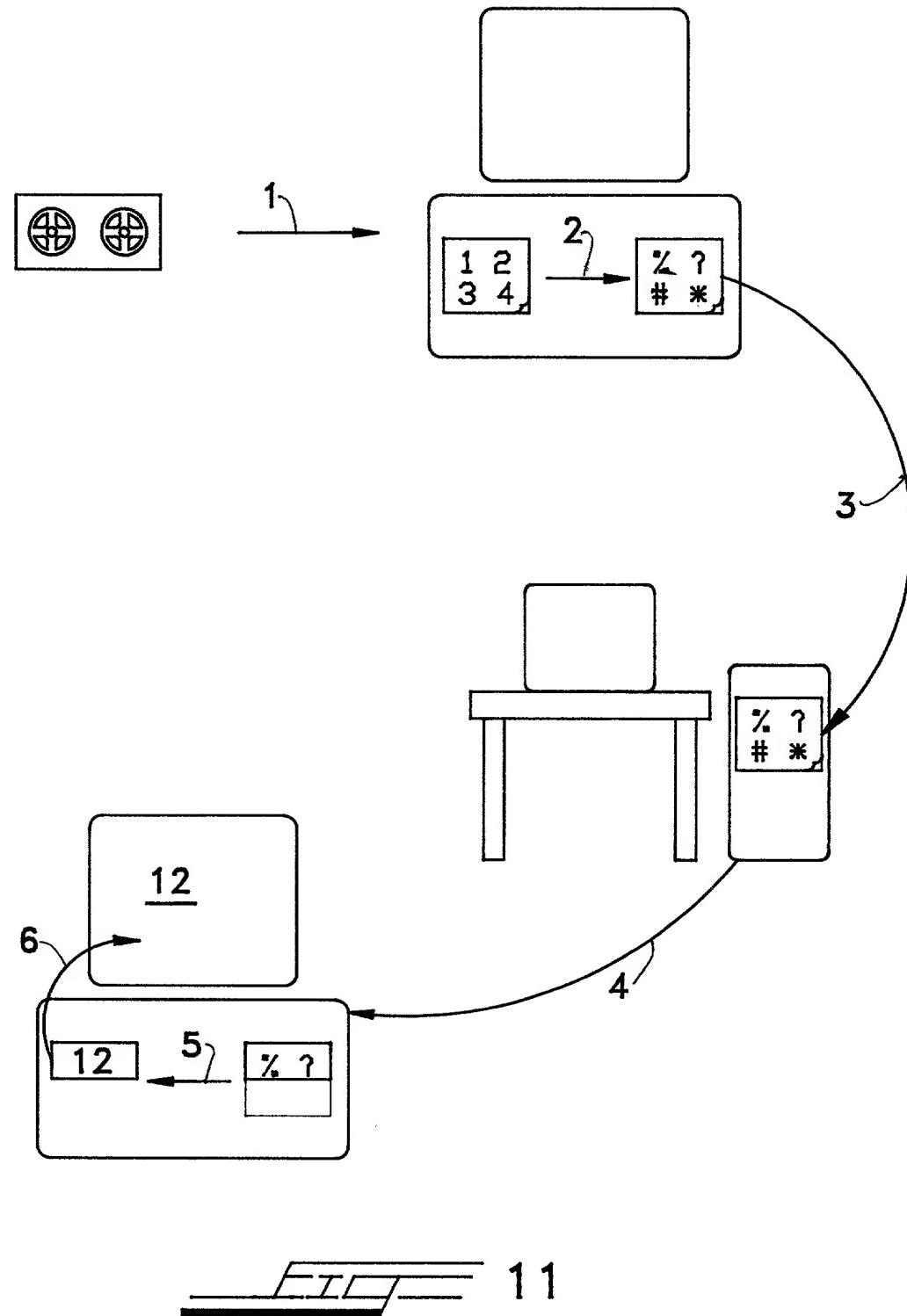
FIG 7

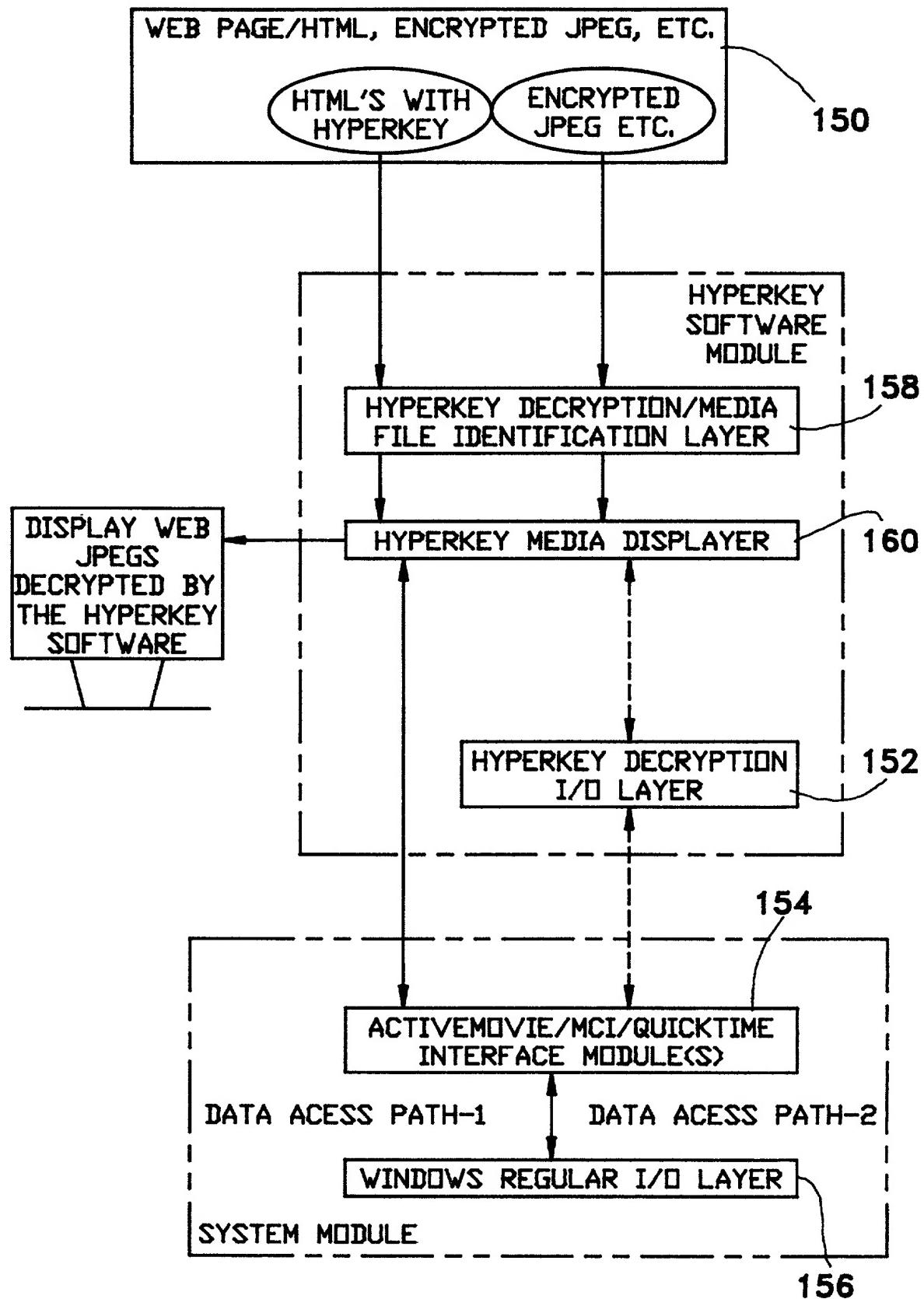
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11 12 13 14 15 16 17 18 19 20





**DECLARATION and POWER OF ATTORNEY FOR PATENT APPLICATION**  
English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled METHOD OF SECURE SERVER CONTROL OF LOCAL MEDIA  
VIA A TRIGGER THROUGH A NETWORK FOR INSTANT LOCAL ACCESS

VIA A TRIGGER THROUGH A NETWORK FOR INSTANT LOCAL ACCESS

## OF ENCRYPTED DATA ON AN INTERNET WEBPAGE

the specification of which

(check one)

is attached hereto.

x was filed on June 10, 1997

Application Serial No. 08/872,082

and was amended on

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

ENGLISH LANGUAGE DECLARATION

Prior Foreign Application(s)

Priority Claimed

(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

08/792,092 <u>08/568,631</u> (Application Serial No.)	January 31, 1997 December 7, 1995 (Filing Date)	Pending Pending (Status)
08/756,162	November 25, 1997	(patented, pending, abandoned) Pending
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any issued thereon.

ENGLISH LANGUAGE DECLARATION

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

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Reg. No. 27,891                    Reg. No. 26,705                    Reg. No. 38,098

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Chicago, Illinois 60603

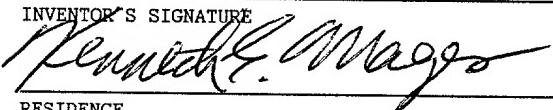
Direct Telephone Calls to: Milton S. Gerstein, 312/372-2926

---

FULL NAME OF SOLE OR FIRST INVENTOR

KENNETH G. MAGES

INVENTOR'S SIGNATURE



DATE

11/7/97

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CITIZENSHIP

U.S.A.

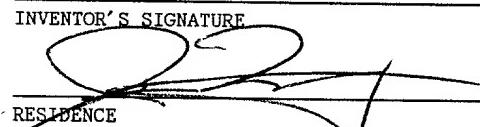
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Same as above.

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JIE FENG

INVENTOR'S SIGNATURE



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